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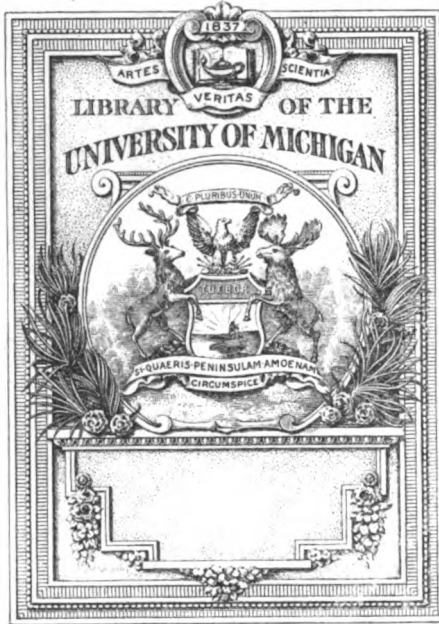
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# ANNUAL REPORT



OF THE

# COMMISSIONER OF PATENTS

FOR

THE YEAR 1878.



WASHINGTON:  
GOVERNMENT PRINTING OFFICE.  
1879.





LETTER  
FROM THE  
COMMISSIONER OF PATENTS.

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JANUARY 30, 1879.—Referred to the Committee on Patents and ordered to be printed.

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DEPARTMENT OF THE INTERIOR,  
UNITED STATES PATENT OFFICE,  
*Washington, D. C., January 29, 1879.*

SIR: In compliance with the requirements of section 494 of the Revised Statutes, I have the honor to submit to Congress, as my Annual Report for the calendar year ending December 31, 1878, the following statements:

1. Detailed statement of all moneys received for patents, for copies of records or drawings, or from any other source whatever.
2. Detailed statement of all expenditures for contingent and miscellaneous expenses.
3. Summary of the business of the Office.
4. Number of patents issued to the several States and Territories, with the ratio of population to each patent granted; also the number of patents issued to subjects or citizens of foreign governments.
5. Work of the Trade-mark division.
6. Foreign patents in possession of the Office.
7. Unprinted specifications.
8. Office routine in patent cases.
9. List of patents granted, with the subjects, designated under proper heads.
10. Alphabetical list of all the patentees, with their places of residence.

Very respectfully, your obedient servant,

H. E. PAINE,  
*Commissioner of Patents.*

Hon. SAMUEL J. RANDALL,  
*Speaker House of Representatives.*

III





# ANNUAL REPORT

## OF THE

# COMMISSIONER OF PATENTS

## FOR THE YEAR 1878.

### I. Detailed statement of all moneys received for patents, for copies of records or drawings, or from any other source whatever.

<b>Applications:</b>	
Cash received.....	\$581,927 00
Cash refunded.....	1,300 00
Net cash.....	580,627 00
Certificates of deposit.....	60,113 00
<b>Total cash and certificates</b> .....	<b>640,740 00</b>
<b>Copies:</b>	
Cash received.....	46,905 37
Cash refunded.....	1,319 35
Net cash.....	45,586 02
Certificates of deposit.....	2,579 05
<b>Total cash and certificates</b> .....	<b>48,165 07</b>
<b>Recording assignments:</b>	
Cash received.....	20,359 55
Cash refunded.....	630 00
Net cash.....	19,729 55
Certificates of deposit.....	737 05
<b>Total cash and certificates</b> .....	<b>20,467 60</b>
<b>For subscriptions to Official Gazette:</b>	
Cash received.....	6,490 28
Cash refunded.....	54 80
Net cash.....	6,435 48
Certificates of deposit.....	328 40
<b>Total cash and certificates</b> .....	<b>6,764 88</b>
<b>Registration of labels:</b>	
Cash received.....	4,002 00
Cash refunded.....	960 00
Net cash.....	3,042 00
Certificates of deposit.....	198 00
<b>Total cash and certificates</b> .....	<b>3,240 00</b>
<b>Aggregates.</b>	
Cash received.....	650,693 20
Cash refunded.....	4,273 15
Net cash.....	655,420 05
Certificates of deposit.....	69,555 50
<b>Total cash and certificates</b> .....	<b>725,375 55</b>

#### EXPENDITURES.

### Amount expended under the several appropriations, from January 1, 1878, to January 1, 1879.

Salaries.....	\$380,631 23
Gazette.....	35,041 63
Contingent expenses.....	78,065 04
Copies of drawings.....	50,801 15
Tracings.....	8,105 20
Photolithographing.....	50,438 55
<b>Total</b> .....	<b>503,082 89</b>
<b>RECEIPTS OVER EXPENDITURES.</b>	
Total receipts.....	725,375 55
Total expenditures.....	503,082 89
	<b>132,292 66</b>

### II. Detailed statement of all expenditures for contingent and miscellaneous expenses.

	Balance of appropriation brought forward.....	\$19,337 65
Jan.	5. J. W. Boteler & Bro., sundries.....	\$27 90
	7. H. C. Geisburg, copies, &c.....	1 80
	7. Wm. Brakhagen, file-straps.....	42 00
	8. L. H. Schneider, hardware.....	87 88
	8. Germond Crandell, books.....	52 50
	10. W. S. Mitchell, carpets, &c.....	298 12
	11. John A. Darling, books.....	30 00
	12. E. H. King, furniture.....	228 50
	14. Chas. J. Gooch, paper-fasteners.....	16 50
	14. Robert Beall, books.....	10 40
Feb.	5. E. H. Woodruff, file-boxes.....	68 80
Jan.	14. Geo. R. Gray, subscription to Union.....	3 00
	15. Geo. W. Cole, services.....	1 50
	18. Henry F. Reh, boxes.....	7 50
	18. Aug. Burdorf, services.....	22 00
	18. Aug. Burdorf, repairing furniture.....	25 00
	18. Chas. Mason, copies.....	3 25
	21. Willett & Libbey, lumber.....	67 84
	24. Wm. H. Dempsey, paper.....	56 25
Feb.	25. Henry W. Saul, baskets.....	8 00
Jan.	26. E. H. King, furniture.....	80 00
	25. Chas. J. Gooch, fasteners.....	16 50
Feb.	31. Ben. Moten, paste.....	19 00
	2. W. H. H. Nally, marking books.....	46 20
	4. Robert Boyd, hardware.....	30 52
	4. W. H. & O. H. Morrison, digest.....	13 00
	4. Holley Jefferson, carting.....	75
	5. E. J. Hayward, washing.....	31 00
	6. E. H. King, furniture.....	285 00
Jan.	— Pay-roll, services.....	3,478 40
		<b>5,058 91</b>
Feb.	4. Balance of appropriation January 31.....	14,278 74
	4. Solomons & Chapman, sundries.....	15 60
	7. W. W. Burdette & Co., towels, &c.....	27 44
	7. Chas. Fisher, M. instruments.....	38 25
	8. American Journal of Microscopy, subscription.....	2 50
	9. W. F. Lutz, stamp.....	9 00
	9. Gustav E. Stechert, book.....	5 59
	11. J. H. Whittaker, services.....	50 00
	11. D. Lathrop & Co., book.....	1 00
	13. John H. Schultz, R. R. Journal.....	10 00
	14. Macmillan & Co., subscription.....	5 00
	15. A. H. Stockman, Picturesque World.....	2 00
	15. Wm. Ballantyne, stationery.....	17 20
	19. Earl Bill, copies.....	2 70
	21. E. H. King, furniture.....	376 50
	26. Luther Tucker & Son, subscription.....	3 00
	28. P. W. Page, services.....	50 00
	28. J. H. Whittaker, services.....	50 00
	28. Ben. Moten, paste.....	16 50
Mar.	1. Robert Beall, books.....	10 00
	1. Wm. H. Veerhoff, shades, &c.....	52 00
	1. Alexander & Son, paper-hanging.....	13 10
Feb.	28. Pay-roll, services.....	3,180 60
		<b>3,937 98</b>
Mar.	2. Balance of appropriation February 28.....	10,340 76
	2. E. J. Hayward, washing.....	27 42
	6. B. Westermann, books, &c.....	151 34
	6. R. Beall, books, &c.....	11 50
	7. E. M. Whittaker & Son, books, &c.....	20 20
	7. Solomons & Chapman, cyclet-machine.....	27 50
	7. John C. Parker, subscription.....	24 00
	8. E. L. Bugbee, telegrams.....	4 32
	11. Germond Crandell, books.....	48 75
	12. E. H. King, furniture.....	123 00
	14. National Republican, subscription.....	8 00
	15. Norris Peters, drawing-paper.....	30 00
	20. E. W. Woodruff, file-holders.....	65 00
	21. W. B. Moses, furniture.....	616 09
	25. H. W. Saul, basket.....	2 00
	25. Germond Crandell, books.....	25 50

Mar.	27.	Wm. Brakhagen, repairing mail-bag.	\$2 50
	27.	Leonard Whitney, telegrams.	1 25
	27.	B. F. Stevens, British patents.	426 77
	28.	Daniel Kolb, chemicals, &c.	29 35
	30.	I. P. Libbey, repairing clocks.	50 00
	30.	J. H. Whittaker, services.	50 00
Apr.	1.	P. W. Page, services.	50 00
	1.	Ben. Moten, paste.	21 50
	2.	E. J. Hayward, washing.	26 00
	2.	Great Falls Ice Company, ice.	270 00
	2.	H. F. Reh, boxes.	21 00
	3.	Chas. R. Dodge, subscription.	1 00
	2.	Willett & Libbey, lumber.	55 97
	3.	Wm. Yorke AtLee, stamps.	32 25
Mar.	30.	Pay-roll, services.	3,481 87

\$5,804 08

4,636 68

26,000 00

By additional appropriation.

Balance of appropriation March 31

Apr.	3.	Geo. Ryneal, jr., glass, &c.	77 42
	3.	H. W. Hamilton, stove-pipe, &c.	70 10
	6.	James Keleher, livery.	25 00
	8.	B. Westermann, books, &c.	158 12
	8.	D. Oliphant, copies.	1 50
	9.	Henry F. Reh, boxes.	10 00
	11.	F. W. Christern, books.	3 24
	11.	Robert Boyd, hardware.	48 90
	12.	L. H. Schneider, hardware.	44 62
	13.	Wash. B. Williams, shades, &c.	15 65
	15.	John C. Fry, Ex. catalogues.	23 00
	18.	Adams Express Co., transportation.	1 25
	18.	J. B. Lippincott & Co., subscription.	4 00
	22.	James J. De Barry, C. "Dater".	9 00
	26.	Henry Kimmel, castings, &c.	2 15
	26.	Wm. F. Lutz, stamps, &c.	3 25
	27.	H. Baumgarten & Bro., repairing stamp.	2 75
	27.	Western Union Tel. Co., telegrams.	1 53
	30.	Pay-roll, services.	6,446 45
	30.	P. W. Page, services.	50 00
	30.	Jas. A. K. Moore, paste.	30 50
May	1.	Robert Beall, books.	5 00
	1.	Robert Beall, books.	36 20
	1.	J. H. Whittaker, services.	50 00
	2.	Wm. Ballantyne & Son, drawing-paper.	21 50
	2.	C. C. Wilson, stamps, &c.	112 90
	3.	F. Etheridge, bag-holder.	5 00

7,182 03

Balance of appropriation May 1.

	7.	E. J. Hayward, washing.	32 40
	8.	Wm. Woods & Co., subscription.	2 85
	4.	A. L. Luyster, book.	13 50
	14.	E. O. Chapman, books.	3 65
	15.	J. H. Williams, services.	39 00
	18.	N. A. Poole & Co., window-cleaners.	4 00
	18.	Harper Bros., Bazar.	3 20
	27.	H. I. Hart, killing insects.	8 00
	23.	Norris Peters, drawing-paper.	75 00
	29.	Wm. Yorke AtLee, stamps.	17 50
	29.	John C. Hogan, awnings.	437 65
	31.	M. E. Mann, cyclopaedia.	5 00
	31.	James H. Williams, services.	42 00
	31.	James Lingenfelter, services.	35 00
	31.	T. F. Wilson, services.	22 00
	31.	Germond Crandell, books.	23 75
June	1.	Geo. Ryneal, oil.	90
	1.	Robert Boyd, hardware.	22 80
	1.	James A. K. Moore, paste.	16 25
	3.	Journal of Chemistry, subscription.	3 00
	3.	Dana & Silliman, subscription.	6 12
	3.	Chas. J. Gooch, paper-fasteners.	5 10
	4.	Robert Beall, books.	32 50
	6.	E. J. Hayward, washing.	26 33
May	31.	Pay-roll, services.	8,126 19

9,051 28

Balance of appropriation May 31.

June	8.	Rose Belford Pub. Co., subscription.	4 00
	8.	E. H. King, case.	40 00
	8.	W. T. Lutz, ribbon.	4 00
	15.	Levi Curry, boxes.	6 00
	15.	Houghton, Osgood & Co., subscription.	2 50
	15.	Theo. F. Wilson, services.	25 00
	15.	James H. Williams, services.	39 00
	15.	James Lingenfelter, services.	24 00
	15.	Peter Ailer, services.	24 00
	29.	James H. Williams, services.	36 00
July	3.	Great Falls Ice Company, ice.	277 20
	1.	I. P. Libbey, care of clocks.	50 00
	2.	James Keleher, horse-hire.	6 00
June	30.	Pay-roll, services.	14,387 32

14,933 52

Bills of Lathrop &amp; Co., \$1, Stockman, \$2, and Brown, \$3—\$6, (previously charged, but not paid)

6 00

73 85

Apr.	30.	Anna Sterling, services.	\$59 30
Mar.	31.	Anna Sterling, services.	15 80
Apr.	3.	Western Union Tel. Co., telegrams.	50
June	—.	Western Union Tel. Co., telegrams.	25

\$75 85

Amount of appropriation July 1, 1878.

July	1.	E. W. Woodruff, file-holders.	65 00
	3.	Robert Boyd, hardware.	36 56
	3.	C. C. Wilson, stamps, &c.	135 05
	3.	Aug. Burgdorf, furniture.	51 00
	3.	Western Union Tel. Co., telegrams.	1 80
	8.	E. J. Hayward, washing.	32 64
	8.	J. S. Topham, harnesses.	40 00
	9.	Germond Crandell, books.	25 00
	9.	A. Hoen & Co., printing.	16 80
	10.	F. Seyboldt, subscription.	10 00
	10.	W. W. Burdette & Co., towels, &c.	48 12
	10.	Van Nostrand, magazine.	5 00
	10.	E. M. Willis, office furniture.	135 00
	10.	Geo. C. Maynard, telephones.	241 75
	10.	Library Journal, subscription.	6 00
	11.	Wm. F. Lutz, stamps.	28 60
	12.	Henry Saul, baskets.	6 00
	12.	Geo. Stevens, boxes.	18 00
	12.	E. H. King, office furniture.	530 58
	13.	A. E. Dennis, gas-fitting.	3 00
	15.	James H. Williams, services.	39 00
	15.	J. A. K. Moore, paste.	25 25
	15.	Otto De Moll, services.	29 25
	15.	James Lingenfelter, services.	32 50
	15.	B. Westermann, books.	98 10
	15.	Journal of Commerce Co., subscription.	1 00
	16.	S. D. Oliphant, copies, &c.	10 90
	18.	Lorenzo Rice, cleaning carpets.	2 24
	18.	J. W. Boteler & Bro., crockery.	94 45
	20.	Francis Miller, brushes, oil, &c.	16 40
	20.	Chas. Fisher, glasses.	5 50
	20.	Thos. Ferry, cleaning carpets.	44 94
	22.	H. L. Pelouze & Son, type.	50 15
	22.	E. H. King, model-cases.	63 50
	27.	E. W. Woodruff, file-holders.	75 80
	27.	Aug. Burgdorf, furniture.	298 50
	27.	A. H. Stockman, encyclopedia.	6 50
	27.	Levi Curry, case.	140 00
	25.	C. C. Wilson, stamps, &c.	58 70
	31.	James H. Williams, services.	42 00
	31.	Germond Crandell, books.	87 25
	31.	A. S. Adams, services.	28 00
	31.	Richard J. Gallaher, services.	75 80
	31.	Lucy B. Bailey, services.	9 00
	31.	Susan Shacklett, services.	52 00
	31.	R. H. E. Siebert, locks.	100 00
	31.	Pay-roll, (clerical,) services.	1,628 48
	31.	T. F. Wilson, services.	28 00
	31.	Pay-roll, (laborers,) services.	2,529 90
	31.	H. N. Rothery, services.	42 00
Aug.	1.	E. Morrison, blanks.	109 35
July	31.	Wilmer & Rogers News Co., Review.	13 20

7,263 65

Balance of appropriation July 31.

Aug.	1.	W. H. Veerhoff, shades.	46 00
	1.	James Lingenfelter, repairs.	17 50
	2.	James A. K. Moore, paste.	27 00
	3.	W. H. Boyd, Directory.	4 00
	7.	H. N. Rothery, repairing cases.	10 00
	7.	E. M. Whittaker & Son, book-holders.	7 00
	8.	Crane & Co., parchment.	197 47
	8.	Atlantic and Pacific Telegraph Co., telegrams.	64
	8.	E. J. Hayward, washing.	17 57
	9.	G. N. Rider, books.	16 80
	14.	C. G. Maynard, telephone.	24 50
	14.	E. Morrison, blanks.	370 00
	14.	James H. Williams, services.	39 00
	15.	Wm. I. Newton, services.	10 50
	15.	H. M. Robinson, services.	20 00
	15.	Wm. Ballantyne & Son, paper.	15 00
	16.	Alfred Warwick, labor.	26 00
	16.	Levi Curry, repairing cases.	28 75
	17.	E. H. King, furniture.	300 80
	17.	L. H. Schneider, hardware.	39 25
	17.	James Lingenfelter, services.	32 50
	19.	Little, Brown & Co., reports.	36 50
	20.	Solomons & Chapman, sponge-rubber.	7 50
	20.	Solomons & Chapman, arm-rests.	4 50
	26.	W. B. Moses, matting, &c.	707 71
	28.	John E. Gorman, file-boxes.	70 00
	30.	Alfred Warwick, repairing furniture.	16 00
	30.	James Lingenfelter, repairing furniture.	35 00
	31.	Jos. Rakeman, painting, &c.	185 50
	31.	G. D. Lawson, services.	8 00
	31.	James H. Williams, services.	42 00
	31.	R. J. Gallaher, services.	75 00
	31.	A. E. Dennis, bronzing, &c.	16 00
	31.	W. H. Veerhoff, shades.	10 00
Sept.	2.	Robert Boyd, hardware.	31 29
Aug.	31.	Clerical pay-roll, services.	1,237 60
	31.	Laborers pay-roll, services.	2,776 10

6,528 58

Balance of appropriation August 31.

36,207 77

Sept.	3. James A. K. Moore, paste	\$30 50
	4. W. H. Ross, sawdust	16 50
	4. Willett & Libbey, lumber	151 63
	6. J. B. Lippincott, book	5 86
	7. G. D. Lawson, services	24 00
	7. C. C. Wilson, dies, &c.	131 15
	9. E. J. Hayward, washing	16 20
	10. Western Union Tel. Co., telegrams	2 62
	11. B. F. Stevens, spec's, sub's, &c.	487 16
	14. J. H. Williams, services	46 00
	13. Wm. Minster, label-plates	15 00
	14. James Lingenfelter, services	30 00
	14. J. G. Weaver, file-case	25 00
	14. G. D. Lawson, services	24 00
	14. E. H. King, furniture	291 40
	16. Little, Brown & Co., book	6 00
	18. Norris Peters, photolithographs	120 00
	18. Norris Peters, photolithographs	158 00
	19. B. F. Stevens, (A.,) periodicals, &c.	100 54
	19. B. F. Stevens, (B.,) periodicals, &c.	100 54
	20. Aug. Burgdorf, portfolios, &c.	122 00
	20. A. E. Denis, bronzing, &c.	22 00
	23. A. E. Denis, services	16 00
	23. Robert Boyd, hardware	24 88
	27. John C. Parker, pens	5 00
	28. James H. Williams, services	39 00
	28. G. D. Lawson, services	52 00
	28. Levi Curry, drawers, &c.	96 25
	30. I. P. Libbey, repairing clocks	50 00
	30. Wm. Wood & Co., subscription	1 50
	30. W. White, freight	4 09
	30. Germond Crandell, books	48 70
	30. James Lingenfelter, services	32 50
	30. E. H. King, repairing furniture	144 00
	30. R. J. Gallaher, services	73 40
	30. C. C. Wilson, dies and stamps	189 80
	30. W. D. Webb, services	60 00
Oct.	1. James Keleher, carriage-hire	8 00
	1. Geo. C. Maynard, repairing telephone	15 00
	1. J. A. K. Moore, paste	28 00
	1. Geo. W. Knox, freight	2 06
	1. D. Ballauf, furniture	14 00
	2. H. Baumgarten & Co., repairing stamp	2 75
Sept.	30. R. Hoe & Co., printing-press	217 00
Oct.	2. Wm. Yorke AtLee, stamps	12 50
	2. Francis Miller, printers' stock	5 60
	1. Francis Miller, printers' stock, &c.	39 75
	1. Daniel Kolb, drugs	19 45
	2. Great Falls Ice Company, ice	202 92
	2. W. H. Veerhoff, curtains	11 00
Sept.	30. Pay-roll, (clerical,) services	1,187 10
	30. Pay-roll, (laborers,) services	2,663 80
		\$7,087 21
	Balance of appropriation September 30	29,120 56
Oct.	3. S. D. Oliphant, copies	3 77
	4. Wm. Minster, labels	10 00
	5. A. E. Buck, copies	5 10
	5. Adams Express Co., transportation	45
	8. B. Westermann & Co., books	83 35
	8. Little, Brown & Co., books	80 65
	10. E. H. King, case	77 00
	12. E. J. Hayward, washing	19 97
	14. Geo. Stevens, boxes	30 00
	15. James H. Williams, services	39 00
	15. Reversible Collar Co., collar-stock	86 48
	15. James Lingenfelter, services	33 50
	16. Washington City Post-Office, postage	151 75
	17. Geo. W. Knox, transportation	2 73
	18. H. Baumgarten & Bro., stamp	10 00
	19. G. D. Lawson, services	8 00
	19. W. S. Mitchell, matting	156 81
	24. W. W. Levering, drugs	8 00
	25. J. W. Boteler & Bro., sundries	21 15
	26. F. W. Robinson Co., subscription	1 00
	28. Charles Mason, copies	26 45
	28. Western Union Tel. Co., telegrams	50
	30. Am. Lib. Assn., furniture	72 05
	30. Robert Beall, books	6 50
	31. E. D. Webb, services	67 50
	31. J. H. Williams, services	42 00
	31. James Lingenfelter, services	35 00
	31. Robert Boyd, hardware	19 05
	31. R. J. Gallaher, services	75 80
	31. W. H. Veerhoff, shades	11 00
	31. Aug. Burgdorf, P. H. cases	311 50
	31. H. L. Pelouze & Son, type, &c.	66 06
Nov.	1. E. J. Hayward, washing	15 55
Oct.	31. Pay-roll, (clerical,) services	1,156 10
	31. Pay-roll, (laborers,) services	2,859 10
		5,602 77
	Balance of appropriation October 31	23,517 79
Nov.	1. E. W. Woodruff, file-holders	65 00
	2. C. C. Wilson, dies and stamps	58 40
	3. Jas. A. K. Moore, paste	34 50
	5. Geo. Rynear, jr., printers' stock	11 16
	5. Levi Curry, floor in printers' room	65 00
	6. Henry F. Reh, boxes	30 00
	6. Wm. Brakhagen, mail-bag	1 25
	8. William Cushing, N. A. Review	5 00
	7. Thos. G. Newman & Son, subscription	10 00
	9. M. Gee & Williams, cleaning carpets	33 90

Nov.	13. A. M. Tubman, paper-hanging	\$5 25
	14. E. H. King, case	25 00
	15. E. F. Brooks, gas-burner	9 00
	15. Pay-roll, (laborers discharged,) services	870 82
	15. Pay-roll, (clerical discharge,) services	584 06
	15. James H. Williams, services	39 00
	15. James Lingenfelter, services	32 50
	18. W. B. Williams, cloth, &c.	24 90
	20. Wm. Bushnell, subscription	3 00
	20. H. Baumgarten & Bro., dating-stamp	20 00
	23. James S. Oden, services	53 50
	23. H. F. Reh, boxes	2 50
	25. Industrial Pub. Co., subscription	1 00
	27. James Lingenfelter, services	32 50
	27. McGee & Willard, cleaning carpets	6 45
	29. Levi Curry, floor in printers' room	48 00
	30. James H. Williams, services	39 00
	30. Richard J. Gallaher, services	73 40
	30. J. H. Adrians, jr., services	19 56
	30. L. H. Flynn, file-wrappers	18 00
	30. Daniel Williams, services	22 50
	30. E. D. Webb, services	65 00
	30. Pay-roll, services	1,002 00
		\$3,293 75
	Balance of appropriation November 30	20,224 04

Dec.	2. Fannie Frere, services	24 45
	2. J. A. K. Moore, paste	25 50
	3. Robert Boyd, hardware	33 20
	3. C. C. Wilson, stamps	31 95
	4. B. F. Stevens, books, &c.	51 89
	6. Wm. Ballantyne & Son, books, &c.	6 85
	6. E. J. Hayward, washing	15 63
	9. James Talty, repairing	3 50
	9. R. G. Hutchinson, strap-files	150 85
	13. Aug. Burgdorf, cases	35 00
	14. James Lingenfelter, services	30 00
	14. James H. Williams, services	30 00
	20. Willett & Libbey, lumber	134 92
	23. Susan Bird, paste	22 50
	23. James Lingenfelter, services	35 00
	23. Richard J. Gallaher, services	75 80
	24. E. D. Webb, services	47 50
	26. Tenney & Reese, stamp	8 00
	26. A. H. Stockman, encyclopedia	6 00
	27. Boyd's Directory Co., Directory	25 00
	27. E. W. Woodruff, file-holders	130 00
	28. James H. Williams, services	42 00
	30. I. P. Libbey, repairing clocks	50 00
	30. Crane & Co., parchment	96 05
	30. E. H. King, furniture	113 50
	31. Wash. B. Williams, furniture, &c.	29 93
	31. E. D. Webb, services	17 50
	31. L. H. Flynn, file-wrappers	63 81
	31. Pay-roll, services	1,014 00
	5. D. W. Lapham, pen	3 00
		2,850 43

Balance of appropriation December 31, 1878.. 17,864 61

## III. Summary of the business of the Office.

Applications for patents, including designs	20,200
Applications for reissue of patents	638
Patents issued, including designs	12,935
Patents reissued	509
Patents extended	
Caveats filed	2,765
Patents expired during the year, exclusive of designs	2,617
Patents withheld for non-payment of final fee	832
Applications for registration of trade-marks	1,577
Trade-marks registered	1,455
Applications for registration of labels	700
Labels registered	492

IV. Number of patents issued to the several States and Territories, with the ratio of population to each patent granted; also, the number of patents issued to subjects or citizens of foreign governments.

States and Territories.	Patents and designs.	One to every—
Alabama	39	25,563
Arizona Territory	2	4,829
Arkansas	45	10,776
California	320	1,750
Colorado	35	1,138
Connecticut	529	1,015
Dakota Territory	5	2,833
Delaware	39	3,209
District of Columbia	146	908
Florida	3	65,682
Georgia	105	1,127
Idaho Territory	2	7,499
Illinois	998	2,547
Indiana	245	4,842
Iowa	325	3,676

# VIII REPORT OF THE COMMISSIONER OF PATENTS FOR THE YEAR 1878.

## IV. Number of patents issued to the several States and Territories, &c.—Continued.

States and Territories.	Patents and designs.	One to every—
Kansas .....	63	5,784
Kentucky .....	145	9,110
Louisiana .....	76	9,564
Maine .....	140	4,477
Maryland .....	183	4,267
Massachusetts .....	1,199	1,216
Michigan .....	390	3,036
Minnesota .....	129	3,408
Mississippi .....	38	21,787
Missouri .....	315	5,499
Montana Territory .....	3	3,985
Nebraska .....	50	2,459
Nevada .....	36	1,180
New Hampshire .....	92	3,459
New Jersey .....	490	1,870
New Mexico Territory .....	3	30,624
New York .....	2,599	1,685
North Carolina .....	53	20,214
Ohio .....	1,070	2,490
Oregon .....	35	2,568
Pennsylvania .....	1,296	2,718
Rhode Island .....	190	1,143
South Carolina .....	28	25,200
Tennessee .....	98	12,842
Texas .....	130	6,219
Utah Territory .....	7	12,392
Vermont .....	109	3,032
Virginia .....	113	10,848
Washington Territory .....	13	1,842
West Virginia .....	58	7,020
Wisconsin .....	251	4,218
Wyoming Territory .....	8	1,138
United States Army .....	4	
United States Navy .....	1	
Total .....	12,354	

Of the patents, including designs, there were granted to the—	
Citizens of the United States .....	12,354
Subjects of Great Britain, including Canada .....	336
Subjects of France .....	60
Subjects of Germany .....	98
Subjects of other foreign governments .....	87
Total .....	12,935

## V. Work of the Trade-Mark Division.

### Cases for Action.

Cases on hand at the beginning of year .....	52
Trade-marks received during the year .....	1,604
Labels received during the year .....	711
Amended cases .....	1,770
Total cases for action .....	4,140

### Cases Acted Upon.

Whole number of trade-marks and labels passed to issue during the year .....	1,990
Whole number of actions other than issues during the year .....	2,105
Total actions on applications during the year .....	4,095
New cases on hand .....	8
Old cases on hand .....	43
Answers to miscellaneous letters of inquiry .....	113
Briefs in appeal cases .....	39
Interferences declared .....	18
Trade-marks registered .....	12
Total actions during the year .....	4,328

This exhibit shows an increase over the preceding year, both in the number of applications received for action and in the number of actions made. In 1877 there were 1,377 trade-mark applications and 627 label applications filed in the Office, the fees deposited therewith amounting to \$38,187. There were 833 more applications received for action during the year just closed than during the previous year, 227 of which were new and 556 old or amended cases; and there were 834 more actions made on applications during the last year than during the preceding year.

The receipts of this division for the year 1878 are as follows:

Amount derived from 1,567 trade-mark applications, upon which full fees have been paid .....	\$39,175
Amount derived from 37 trade-mark applications, upon each of which first fee has been paid .....	370
Total trade-mark fees .....	39,545
Amount derived from 711 label applications .....	4,266
Total receipts for the year .....	43,811

This table shows an increase of \$5,624 over the receipts for the year 1877.

It is estimated that \$10,399 will cover the expenditures incurred in carrying on the work of the division for the past year, as shown by the following table:

Salary of Examiner .....	\$2,400
Salary of Second Assistant Examiner .....	1,600
Salary of first-class clerk .....	1,900
Salary of clerk of division .....	900
Salary of additional clerk .....	480
For printing trade-mark specifications, (estimated) .....	2,619
For salaries of clerical help in the preparation of trade-mark certificates, &c., (estimated) .....	1,200
Total .....	10,399

Recent changes have reduced the force of the division. It now consists of—

One Examiner, (annual salary) .....	\$2,400
One Second Assistant Examiner, (annual salary) .....	1,600
One clerk, (annual salary) .....	900
One additional clerk, (annual salary) .....	600
Total .....	5,500

In 1878 there were issued 1,455 trade-mark certificates and 492 label certificates, making a total issue of 1,947 certificates.

## VI. Foreign Patents in possession of the Office.

Copies of patents issued by other governments have been received in exchange for those of the United States, as follows:

### ENGLISH PATENTS.

By an arrangement made about a year ago, copies of English patents are received from the Great Seal Patent Office through the Government mail, by the courtesy of the State Department, immediately upon publication. The office is now in possession of complete sets of the old law series, 1617–1852, Nos. 1 to 14,359, text and plates, plates on muslin, bound separately, 816 volumes; series of 1852, 1852–1875, same form, 1,750 volumes; and series 1876, 1876 to date, text and plates bound together, 8vo., 120 volumes; a total of 2,676 volumes.

Indexes to the above, alphabetical, chronological, and subject-matter, to the year 1876, have been received, and also complete sets of abridgments to the year 1866.

### GERMAN PATENTS.

Complete sets from July 1, 1877, to date, text and plates, 30 volumes.

### FRENCH PATENTS.

First series, 1781–1844, comprising 12,543 specifications, 93 volumes text, 46 volumes plates. Second series, 1844–1863, comprising about 6,500 specifications, 87 volumes text, 44 volumes plates. Third series, 1871–1875, including specifications from No. 91,631 to 106,000, 14 volumes text, 14 volumes plates. These are all that have been printed. The patents for the years 1864 to 1870, inclusive, numbered from 60,201 to 91,630, have not been published by the French Government.

## AUSTRIAN PATENTS.

Series, 1821-1847, 6 volumes, 3 volumes plates.

## BELGIAN PATENTS.

Series, 1854-1877, 24 volumes text, 6 volumes plates.

## CANADIAN PATENTS.

1854-1855, 2 volumes.

Italian, Swedish, and Norwegian patents, imperfect sets, as far as published. The same of patents issued by New Zealand and Victoria.

VII. *Unprinted Specifications.*

There were 10,061 patents issued from 1790 to 1836, inclusive. The records of nearly all of these were destroyed by the fire of 1836. Two thousand eight hundred and forty-five were restored, having been returned to the Office by the patentees to be again recorded.

From 1836 to 1866, inclusive, 56,163 patents were issued, including reissues and designs. The printing of patents dates from November 20, 1866. About 1,000 of the patents issued in 1866 were printed. There thus remain about 58,000 recorded patents unprinted. All the original drawings accompanying these patents have been reproduced by the photolithographic process.

It is difficult to estimate exactly the cost of printing these patents; but, on the basis of the present cost of printing specifications, the old specifications being assumed to be of the same average length as those now printed, it is estimated that the cost of printing the 58,000 specifications referred to will amount to \$230,000. This estimate is based on the average cost per page at present rates of printing one hundred specifications.

The completion during the past year of the reproduction of all the old drawings, as above mentioned, has considerably reduced the demand for manuscript copies of their accompanying specifications. Still the receipts of the Office from this one source continue to be about \$5,000 per year.

It now requires, on an average, the constant employment of eight copyists to make and compare the copies daily ordered of these specifications. Were these printed the salaries of six copyists and two comparers, amounting to the annual sum of \$7,400, would be saved to the Office.

Furthermore, a much greater amount would be received annually from the sales of the printed copies at the present rates of selling specifications. The demand for such printed specifications, not only for single copies, but from persons and libraries desirous of completing their sets of patents generally, or in particular lines of inventions, would be extensive. Thus the saving to the Office and the receipts from sales would in a number of years equal the entire outlay for printing. But the cost or saving of money in this matter is of small consequence compared with the advantage to be afforded this Office and the public, in the examination of applications for patents, and the dissemination of knowledge of the state of the art in every class of inventions. Confined now to single manuscript copies of 58,000 patents, the labor of their examination, constantly necessary by this Office, is very great, and to the public generally they are practically a sealed book.

Another important point to be considered is, that by constant handling for the purposes of making copies, very many of the original specifications are being worn

out, and are also in danger of being lost, especially as at present it is necessary that they should be taken from the archives to an outside building for the purpose of copying whatever copies are ordered.

VIII. *Office Routine in Patent Cases.*

1. An application for letters patent, including the first or examination fee, the petition for a grant, the specification, drawing, and model, is received at the Patent Office either through the mail, by express, or by hand.

2. Matter sent by express is received by the machinist, who makes a daily record of the parts received, including fees, which latter are delivered daily to the financial clerk, who accounts for the same. The machinist labels the models, and shelves them until required in the examination of the application, having indorsed on the labels the applicant's name, the subject of invention, and the date of receipt. The drawing and papers are sent by him to the Application-room, the several parts received being noted upon the specification for guidance in indorsing the application file-wrapper.

3. When the application arrives by mail, or is delivered by hand, the fee is received by the financial clerk, the model is sent to the machinist, and the drawing and papers, with a memorandum of the fee, to the Application-room.

4. Here an alphabetical record is made of all applications, showing the name of the applicant, his residence, the title of the invention, address of attorney, date of receipt of petition, affidavit, specification, drawing, model, and first fee, and the name of Examiner to whom it is sent. A separate account of fees received is also kept, including first and final fees in applications, fees in design, reissue, and trade-mark cases, and in appeals; also, a record of all letters and amendments in applications subsequent to the completion of the same, showing the division to which they are sent.

5. In the Application-room the papers in each application receive the official stamp, indicating the day of their receipt, and are placed in a file-wrapper, upon which is indorsed the name and residence of the applicant, the subject of invention, the date of receipt of petition, affidavit, specification, drawing, and model, and the address of the attorney, if any there be.

6. Meanwhile the drawing is sent to the Drafting-division for inspection as to its mechanical execution. The draftsman places upon its back his stamp, and notes upon its face artistic defects, if any exist, and it is returned to the Application-room. Defects in the drawing may be corrected at any time before final examination of the application.

7. If, as often occurs, the application appears on its face to be defective in form, or if any part is wholly wanting, applicant is notified. Upon completion of the application in proper form, the drawing and file are immediately sent for examination as to patentability to the division to which it pertains.

8. In the Examiner's room the application is registered and numbered. The registry entry includes the date of the receipt by the Examiner of the application, the name of the applicant, the subject of invention, the monthly number, and, usually, an attorney's name and the location (shelf) of model. The register number is placed upon the file-wrapper, drawing, and model, which



latter is delivered to the Examiner by the machinist as soon as required for examination, such delivery being noted upon the back of the drawing, and it is disposed upon a shelf, which, by letter or number, is usually noted upon the model, drawing, file, and register.

9. Each application is taken up for examination in the order of its receipt, excepting preferred cases specified in the statute and rules.

10. The examination relates to the sufficiency of description and the patentability of the matter claimed, and requires a critical reading of the specification and a search through descriptions of prior inventions pertaining to the same subject found in the specifications and drawings of domestic and foreign patents, and in other printed publications, or in manuscript digests of the same. Such search is more or less extended according to the complexity of the invention and the antiquity of the art to which it pertains. It frequently requires, in single cases, the inspection of many hundred drawings and extended reading, occupying several days' time.

11. If upon examination it appears that the matter specified is patentable, and that it is well and sufficiently described, and that it is particularly and distinctly pointed out in the claim, the application is allowed. About fifteen per cent. of completed applications are, after examination, allowed without objection.

12. If, however, the application is rejected, the Commissioner of Patents, by the Examiner, causes the applicant to be informed of the reasons of such rejection, and to be furnished with pertinent information for his guidance as to the further prosecution of the application.

13. Applicant may respond to such rejection by a request for reconsideration with or without amendment of his specification, and he may ask a reconsideration as often as new references are cited. In most applications there occur one, two, or more rejections.

14. Every official communication by the Examiner in an application, and every communication from the applicant or his attorney, is placed in the file and noted upon the back of the file-wrapper in proper order and time, and said wrapper exhibits a complete index of the history of the case from the date of its receipt in the Office. Every official action by the Examiner is duly noted in his register adjacent to the original entry of the application, and all official letters are copied by press into a letter-book.

15. Written amendments of a specification are entered as follows: Matter to be inserted is inclosed by lines on the amendment, and the place of insertion, as stated by applicant, marked on the body of the specification. Matter to be erased from the specification is inclosed by lines and canceled. Similar reference letters are placed on the amendment and on the specification at the place where it is to be entered, and said letters are indorsed on the back of the amendment. Red ink is used for distinctness. Amendments are made in a large majority of cases, and they frequently are so numerous as to exhaust one or more times the whole alphabet for reference letters in a single application.

16. The correspondence, including rejections and amendments, is continued until the application is put

in condition for allowance, or its further prosecution is neglected, or an appeal is taken.

17. If any one of the statutory bars to the grant of a patent, (sections 4886 and 4887, Revised Statutes, Office Rules of Practice, 1, 4, and 5,) or to the reissue of a patent, (section 4916, Rules 64, 66, and 67,) is found to exist upon examination by the Primary Examiner, (section 4893,) and the finding is adhered to upon re-examination, (section 4903, Rule 33,) then an appeal may be taken from such adverse decision to the Board of Examiners-in-Chief, (sections 4909 and 482, Rules 42, first paragraph, and 44, first paragraph,) and from an adverse decision of the Board to the Commissioner in person. (Section 4910, Rule 46.)

18. Any party to an interference, against whom an adverse finding of priority has been rendered, may appeal from the judgment of the Examiner of Interferences to the Board of Examiners-in-Chief, and from an adverse decision of the Board to the Commissioner in person. (Sections 4904, 4909, and 4910, Rules 48 and 55.)

19. Every other question or dispute, under any section of the law or rules, raised before any tribunal having cognizance of the subject-matter, *i. e.*, before a Primary Examiner, Examiner of Trade-Marks, or of Interferences, Board of Examiners-in-Chief, or heads of divisions, is appealable, after adverse decision, directly to the Commissioner.

20. The filing of an appeal is recorded in the Application-room, and the written reasons of appeal placed in a file-wrapper and sent to the proper Examiner, who makes written answer to the same and sends the application and the appeal-file containing reasons and answer to the clerk in charge of appeal-files. After a final adjudication by the Board of Examiners-in-Chief, or by the Commissioner of Patents, or the Supreme Court of the District of Columbia upon further appeal, the application, appeal papers, and decision are returned to the Examiner, who allows the application with or without amendment, or files it among rejected cases according to the tenor of said decision, and sends the appeal-file to the clerk in charge of appeal and interference files.

21. In an appeal to the Commissioner in an interlocutory matter no separate file is kept, but the reasons and answer are inserted in the application-file.

22. When an interference is found to exist between two or more cases the applications are delayed, if practicable without injustice, until each is put in condition for allowance in case it receives award of priority of invention. One application at least, claiming the interfering matter, must be in such condition.

23. Upon declaration of preliminary interference by the Examiner the several parties or their attorneys, and, in case of a patent, both the patentee and his attorney, of record, and all assignees, are notified of the interference, of the names of the parties to the same and their attorneys, and of the residences of both, and of the interfering subject-matter, and of the claims in each case embracing such matter.

24. Copies of these are made in the letter-book, and also written copies to be sent to the parties, and the proper entries are made in the register and on the file-wrappers, and the files and papers sent to the Examiner of Interferences, who, in case the interference appears

to him to have been declared in proper form, fixes the time of filing preliminary statements therein, and causes the copies of letters furnished him to be mailed to the appropriate parties.

25. If, however, he finds on inspection that official rules have not been complied with in the preliminary declaration by the Examiner, he returns the same for correction, in which event a new declaration by the Examiner, with letters, copies, &c., is usually necessary. Interference-files are prepared by the clerk in charge, as in case of an application.

26. After decision by the Examiner of Interferences as to priority, upon evidence and argument, or after final adjudication upon appeal to the Commissioner, the files and papers are returned to the Examiner, who sends the application of the successful party to issue, unless such party is already a patentee or had neglected to properly amend his application before declaration, or unless an interference with a subsequent application occurs, or, finally, unless evidence was incidentally elicited in the interference proceeding which makes it necessary that the application be rejected for want of patentability of subject-matter.

27. In the latter event the applicant is entitled to a reconsideration and an appeal in the usual course.

28. Interference-files are returned to the proper clerk, and the rejected cases placed among rejected files.

29. Rejected cases that are not prosecuted are retained for two years in the Examiner's room, and forfeited cases that are not renewed are held eighteen months. Both are finally sent to the Draftsman's division.

30. Examined or allowed cases are kept in the Issue-division until payment of the final fee, or until forfeiture. In the first case they are sent to the Drafting-division and in the latter to the Examiner. A record of forfeited cases is kept in the Issue-division, and also of allowed cases temporarily returned to the Examiner.

31. In the renewal of forfeited cases the original file and papers are usually retained, the renewal fee and the new date being noted (from Application-room) upon the original file-wrapper.

32. An application having been found to possess the proper requisites is made ready for issue by the Examiner. A brief of the invention is inserted in the file. The name of the applicant, title of invention, and date of allowance are noted upon the face of the drawing, and also the removal of the model, which latter is sent to the Model-room and retained in secrecy until after the grant of the patent. The title is also indorsed upon the file-wrapper, and the date of examination and Examiner's signature placed upon the face of the same.

33. The file and drawing are now sent to the proof-readers in the Issue-division, who inspect or edit the specification and drawing, and if material errors are discovered return the same to the Examiner for correction.

34. Immediately after the case is edited it is sent to the Drafting-division, where the name of the patentee, the title of the invention, and the name of the Examiner who passed the case are recorded, the date of issue is written upon the file, and the drawing is placed in the "Issue-portfolio." The file is then sent to the Issue-division.

35. Upon its receipt in the Issue-division it receives the signature of the chief clerk, a circular of allowance is mailed to the proper party, and the file is pigeon-holed to await the payment of the final fee, which, when received, is noted upon the file.

36. In the Issue-division the case is dated and numbered, and an entry is made on the Alphabetical Register of Patentees, which register shows a list of all patentees, alphabetically arranged, the title of the invention, the class to which it belongs, the date and number of the patent, and the name and address of the person to whom the patent is to be sent.

37. The case is next entered on the Patent-Head Book, and the file then sent to the Drafting-division.

38. The drawing belonging to the case is taken from the Issue-portfolio, and the prospective number of the patent is indorsed upon it. The brief is removed from the file, and the number of the patent is in like manner indorsed upon the latter.

39. The file is returned to the Issue-division, where it receives an examination to insure that it is in proper condition to go forward, and is delivered by messenger to the Public Printer.

40. The specification is put in type at the Government Printing Office, and the file, with a proof of the specification, is returned to the Issue-division, where it is revised and returned to the Printer.

41. A "notice of patent," giving the prospective number and date of the patent, is next made out in the same division and mailed to the person entitled to the information.

42. The file is sent to the Drafting-division, where it is held until the specification (printed) is received from the Public Printer and the printed drawing from the photolithographer. (See paragraph 56.) The class to which the case belongs is noted on the list of cases previously furnished the draftsman from the Issue-division, and the file and "bond-copies" of specification and drawing are sent to the File-room. (By "bond-copies" is meant the copies which are printed on bond-paper and bound with the patent-head.)

43. There the specification and drawing, with the patent-head previously received from the Issue-division, are bound, the seal-paper pasted on, and the case returned to the Issue-division.

44. Here all the papers are finally compared with the Patent-Head Book, and it is seen that the different parts agree and are correct.

45. The patent, being ready for the official signatures and seal, is sent to the Commissioner.

46. The patent is signed by the Secretary of the Interior and the Commissioner of Patents, and the seal of the Office is affixed thereunto.

47. It is then sent to the File-room and placed in an envelope bearing in small letters and figures on the back the number and name corresponding to the number of the patent and name of the inventor.

48. The envelope containing the patent-papers, with the file belonging to the case, is again sent over to the Issue-division. The patent is addressed to the proper party, and the time the patent is sent out is noted on the Alphabetical Register, mentioned in paragraph 36.

49. Previous to the addressing of the patent the file is compared with the register, to see if any change has been made in the address of the person to whom the

patent is to be sent, and such change, if any, is properly noted. This step disposes of the patent.

50. The case is now entered on the "Classification Records," kept in the Issue-division, the data for this entry being taken from the file, and the file is returned to the file-room, where it is retained.

51. If a drawing has been admitted for examination only, and is informal when it reaches the draftsman's desk, (as shown in paragraph 34,) both the file and drawing are here stopped, and the party in interest notified of the fact. When the drawing has been corrected the case is returned to the Examiner, and is started on its course to issue *de novo*.

52. The patent-heads are made up in the Issue-division from the Patent-Head Book noted in paragraph 37. As soon as the patent-head is completed it is sent to the File-room for the action indicated in paragraph 43.

53. The necessary lists for the GAZETTE, the draftsman, machinist, and Record-room, &c., are made up in the Issue-division, the data being obtained from the Patent-Head Book.

54. The brief taken from the file (noted in para-

graph 38,) is sent to the Gazette-division, and is there arranged for publication in that journal.

55. The drawing obtained from the Drafting-division (paragraph 38) has the proper name, title, and number printed upon it by the printer in the Patent Office building, and is sent to the photolithographer, who returns it with a proof-sheet to the Chief Draftsman. After the proof of the drawing is passed upon and approved, it is sent back to the photolithographer, and the original drawing is held for the action indicated in paragraph 57.

56. The specifications and drawings, when printed by the Public Printer and photolithographer, are delivered in the Specification-division, and the bond-copies are sent to the Chief Draftsman, who receives them, as noted in paragraph 42.

57. The drawing having been a second time sent to the photolithographer for the production of copies, (library size,) is afterward sent to the Model-room for identification of the model, which is then exposed to the public view in its appropriate case, and the drawing returned to the Drafting-division to be deposited in its proper portfolio.

# ALPHABETICAL LIST OF PATENTEEES FOR THE YEAR 1878.

[Patentees of Designs, Trade-marks, and Labels follow this in separate indexes, but precede the Alphabetical List of Inventions.]

Number.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Specification.	Drawing.	Volume.	Page.
209, 539	Abbatt, William D., West Chester, N. Y. Hot, cold, and waste water cock.....	Nov. 5, 1878	1	1	14	681
	Abbott, Leon, <i>et al.</i> (See Cabell, Samuel G., assignor) ..... (Reissue.)					
	Abbott, Essex S. (See Addy, Charles J., assignor.)					
199, 171	Abbott, Everett L., and John C. Birdsall, South Bend, Ind. Fire-extinguisher .....	Jan. 15, 1878	475	140	13	90
203, 524	Abbott, Henry, Newark, N. J. Stem-winding watch .....	May 14, 1878	319	91	13	873
	Abbott, James. (See Gidlow & Abbott.)					
	Abbott, Nathan B. (See Crawford, John P., assignor.)					
	Abbott, Nathan B., <i>et al.</i> (See Morgan, William, assignor.)					
203, 867	Abbott, William A., Westfield, Mass. Apparatus for bundling cigars.....	May 21, 1878	684	195	13	926
199, 247	Abbott, William W., assignor, by mesne assignments, to Edward P. Knipe, Philadel- phia, Pa. Machine for cutting wooden heels .....	Jan. 15, 1878	545	161	13	101
8, 320	Abel, Anthony, New York, N. Y. Barber's chair .....	July 9, 1878	531	151	14	80
205, 329	Abel, George, and John Redder, Beaver Falls, Pa. Blank for cutlery .....	June 25, 1878	979	290	13	1153
200, 885	Abell, Barnard Mackensie, and Felix Brecht, New York, N. Y. Toy money-box.....	Mar. 5, 1878	69	24	13	426
204, 123	Able, Adam F., assignor of one-half interest to Charles J. Lewis, New Orleans, La. Toy pistol .....	May 28, 1878	980	279	13	967
200, 886	Ableiter, Albert, Boscobel, Wis. Hame-strap loop .....	Mar. 5, 1878	70	24	13	426
8, 193	Absterdam, John, New York, N. Y., assignor, by mesne assignments, to Mary R. Al- berger. Condenser for steam-engines .....	Apr. 23, 1878	1158	333	13	769
205, 600	Acaster, Amos J., Sheffield, England. Securing railway-rails .....	July 2, 1878	138	42, 43	14	27
	Accelerating Fire-Arms Company. (See Lyman, Azel Storrs, assignor.)					
	Achauer, Herman F. (See Allen, Samuel J., assignor.)					
	Same. (See Youmans, George W., assignor.)					
201, 144	Acheson, Nathan B., Youngstown, Ohio. Nut-lock .....	Mar. 12, 1878	331	101	13	471
206, 065	Same. Rotary water-meter .....	July 16, 1878	669	193	14	102
199, 393	Acheson, William, assignor to self, Thomas Rees, and James Boyd, Pittsburg, Pa. Roll for making ax-blanks .....	Jan. 22, 1878	706	209	13	134
205, 330	Ackermann, Henry, Chicago, Ill. Velocipede .....	June 25, 1878	980	290	13	1153
199, 891	Acklom, George Eratt, Cheltenham, England. Refrigerator .....	Feb. 5, 1878	1	1	13	233
	Adair, George. (See Dyer & Adair.)					
206, 066	Adams, Alexander B., George E. Cain, and Robert Simonton, Huntington, Ind. Rail- way-switch .....	July 16, 1878	670	193	14	103
	Adams, Alfred. (See Cain, Thomas J., assignor.)					
	Same. (See Phillips, Thomas, assignor.)					
	Adams, Alfred, <i>et al.</i> (See Stilwell, Charles B., assignor) ..... (Reissue.)					
	Same. same.					
202, 133	Adams, Benjamin Franklin, Burton, Tex. Corn and cotton-seed planter .....	Apr. 9, 1878	294	87	13	645
	Adams, Bryon D. (See Everett, George W., assignor.)					
	Adams, C. L. (See Fingar, Jacob W., assignor.)					
204, 697	Adams, Calvin, Russellburg, Pa. Saw-teeth .....	June 11, 1878	281	87	13	1055
208, 218	Adams, Clinton, Washington, D. C. Felly-joint holder .....	Sept. 24, 1878	701	207	14	451
210, 889	Adams, E. Allen, Washington, D. C. Medicated soap .....	Dec. 17, 1878	561	.....	14	913
	Adams & Co., F. F. (See Lovell, Melvin N., assignor.)					
	Adams, Frederick W. (See Rathbun & Adams.)					
208, 219	Adams, George B., Newark, N. J. Fountain-pen .....	Sept. 24, 1878	701	207	14	451
210, 653	Adams, George H. and Harrison A., Hill, N. H. Knitting-machine needle .....	Dec. 10, 1878	299	82	14	871
	Adams, George Q. (See Greenleaf & Adams.)					
	Adams, George W. (See Leach, Charles, assignor.)					
	Adams, H., <i>et al.</i> (See Luther, Charles A., assignor.)					
	Adams, Harrison A. (See Adams, George H. and Harrison A.)					
	Adams, Henry H. (See Jones, Smith & Adams.)					
	Adams, Henry J. (See Adams, Stephen B. and Henry J.)					
204, 181	Adams, Henry W., Philadelphia, Pa. Apparatus and process for manufacturing illu- minating gas .....	May 28, 1878	1041	{ 296 297 }	{ 13 14 }	{ 975 728 }
209, 787	Adams, Israel, Worcester, Mass. Machine for trimming and finishing boot and shoe soles	Nov. 12, 1878	282	84	14	728
207, 637	Adams, J. McGregor, Chicago, Ill. Coal-oil stove .....	Sept. 3, 1878	55	16	14	356
	Adams, John F. (See Brower & Adams) ..... (Reissue.)					
203, 868	Adams, John P., Cambridge, Mass. Can or vessel for liquids .....	May 21, 1878	685	195	13	926
206, 207	Adams, John Q., Brooklyn, N. Y. Waste-pipe valve .....	July 23, 1878	850	242	14	128
206, 913	Adams, John Q., assignor of one-fourth interest to John W. Brock, Royal Oak, Mich. Wagon-hound .....	Aug. 13, 1878	282	86	14	245
209, 540	Adams, John Q., Royal Oak, Mich. Shaft for vehicles .....	Nov. 5, 1878	2	1	14	681
210, 074	Adams, John Q. and Oliver R., Marseilles, Ill. Corn-sheller .....	Nov. 19, 1878	596	178	14	768
199, 008	Adams, John S., Elgin, Ill. Mechanism for transmitting power of windmills .....	Jan. 8, 1878	299	88	13	62
205, 331	Same. Mechanism for transmitting motion .....	June 25, 1878	980	290	13	1154
207, 700	Same. Pump .....	Sept. 3, 1878	114	34, 35	14	363
208, 134	Adams, Joseph, Washington, D. C. Gas-regulator .....	Sept. 17, 1878	599	178	14	434
209, 638	Same. same .....	Nov. 5, 1878	113	33	14	696
198, 784	Adams, Luther J., East Templeton, Mass. Cradle .....	Jan. 1, 1878	68	17	13	18
	Adams, Oliver R. (See Adams, John Q. and Oliver R.)					
8, 036	Adams, Otis, San Francisco, Cal. Valve for steam-engine..... (Reissue.)	Jan. 8, 1878	441	{ 129 130 }	{ 13 14 }	{ 84 85 }
	Adams, Peter, jr. (See Shepard & Adams.)					
201, 476	Adams, Peter, jr., assignor to Charles G. and Walter J. Shepard, Buffalo, N. Y. Lock- hinge .....	Mar. 19, 1878	685	210	13	529
	Adams, R., <i>et al.</i> (See Luther, Charles A., assignor.)					
200, 887	Adams, Roswell D., Fulton, N. Y. Wagon-brake .....	Mar. 5, 1878	71	25	13	426

*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
201, 975	Adams, Samuel E., Plain View, assignor to Cornelius Allison, Faribault, Minn. Grain-separator	Apr. 2, 1878	112	33	13	615
210, 480	Adams, Samuel W., Boston, Mass. Perambulating toy	Dec. 3, 1878	91	83	14	836
	Adams & Shaler. (See Delisser, George P., assignor.)					
210, 392	Adams, S. Jarvis, Pittsburg, Pa. Sand-core mold	Dec. 3, 1878	1	1	14	825
210, 393	Same. Method and apparatus for forming molds for casting	Dec. 3, 1878	3	1	14	825
203, 311	Adams, Stephen B. and Henry J., Dunreith, Ind. Stalk-cutter	May 7, 1878	82	24	13	831
202, 212	Adams, Thomas F., assignor to Peerless Brick Company, Philadelphia, Pa. Brick-kiln roof	Apr. 9, 1878	376	110	13	656
	Adams, William A., et al. (See Odendahl, William D., assignor.)					
200, 160	Adamson, Alexander, Washington, D. C. Truss	Feb. 12, 1878	279	83	13	284
206, 994	Same. Shoulder-brace	Aug. 13, 1878	355	109	14	254
205, 518	Adamson, Charles Elsworth, Humboldt, Nebr. Wagon-rack	July 2, 1878	57	17	14	16
203, 980	Adamson, William, Philadelphia, Pa. Extracting hydrocarbons from fatty matters	May 21, 1878	804	231	13	941
203, 981	Adamson, William, and Charles F. A. Simonin, Philadelphia, Pa., assignors to said Adamson. Extracting oils by filtration and trickling	May 21, 1878	805	231	13	942
210, 073	Addison, William S., New Castle, Ind. Cultivator	Nov. 19, 1878	595	177	14	767
8, 246	Addy, Charles J., Boston, Mass. Machine for burnishing the edges of boots and shoes (Reissue)	May 21, 1878	968	277	13	962
201, 977	Addy, Charles J., assignor of one-half interest to Essex S. Abbott, Boston, Mass. Machine for trimming the edges of boot and shoe soles	Apr. 2, 1878	114	33	13	615
	Adee, Frederic. (See Foley, James, assignor.)					
201, 976	Adee, Frederick, et al. (See Robertson, John, assignor.)					
202, 504	Adgate, Joseph J., assignor to Charles E. Parent, New York, N. Y. Furniture-caster	Apr. 2, 1878	113	33	13	615
	Adgate, Joseph J., assignor of one-half interest to Charles E. Parent, New York, N. Y. Fire-escape	Apr. 16, 1878	682	200	13	704
206, 516	Adgate, Joseph J., New York, N. Y. Wagon-jack	July 30, 1878	1213	348	14	178
210, 285	Same. Stretcher for forming swells or enlargements in the uppers of boots and shoes	Nov. 26, 1878	834	246	14	803
	Adle, William Henry. (See Hooven & Adle.)					
205, 820	Adler, Henry, Pittsburg, Pa. Sheet-metal fender	July 9, 1878	403	115	14	64
205, 821	Same. Fender-bar	July 9, 1878	404	116	14	64
206, 410	Same. Ruler	July 30, 1878	1101	314	14	164
201, 145	Adler, Max., assignor to Mayer, Strouse & Co., New Haven, Conn. Corset	Mar. 12, 1878	331	101	13	472
201, 978	Same. same	Apr. 2, 1878	115	34	13	616
201, 146	Adler, Mayer, New York, N. Y. Safe-bolt work	Mar. 12, 1878	332	102	13	472
	Adrian, John P. (See Brown, Thomas S., assignor.)					
199, 486	Adrian, Walter, Poughkeepsie, N. Y. Horse hay-rake	Jan. 22, 1878	794	233	13	148
209, 004	Same. same	Oct. 15, 1878	602	175	14	580
	Adsit, John O. (See Mulford, Daniel L., assignor.)					
203, 691	Adt, John, New Haven, Conn. Wire-cutting machine	May 14, 1878	490	138	13	894
205, 027	Same. same	June 18, 1878	649	191	13	1105
205, 601	Same. Wire-straightener	July 2, 1878	140	43	14	27
206, 995	Same. Machine for making pump-chains	Aug. 13, 1878	356	109	14	254
209, 788	Affel, Michael, assignor to self and John Wickliffe Gardner, Ripley, Ohio. Hat-shade, &c.	Nov. 12, 1878	284	84	14	723
206, 411	Ager, George, assignor to Seth Thomas Clock Company, Thomaston, Conn. Clock-face	July 30, 1878	1101	315	14	164
205, 228	Agnel, Alexandre Esprit Napoléon, assignor to C. W. May, Firnhaber & Co., Paris, France. Bottle-stopper	June 25, 1878	869	257	13	1139
200, 640	Agren, C. Alfred, New York, N. Y. Transposing key-board	Feb. 26, 1878	786	231	13	378
207, 379	Ahlgren, Olof P., Chicago, Ill. Churn-dasher	Aug. 27, 1878	773	230	14	316
201, 147	Ahrend, Hermann, assignor to Romer & Co., Newark, N. J. Seal-lock	Mar. 12, 1878	333	102	13	472
206, 517	Same. Padlock	July 30, 1878	1214	349	14	178
205, 229	Aikens, William Henry, San Luis Obispo, Cal. Feed-cutter	June 25, 1878	870	257	13	1139
207, 380	Aikens, Henry Vandenburg, Fishkill Landing, N. Y. Pneumatic gong-bell	Aug. 27, 1878	774	230	14	316
	Aiken, John H. (See Arnold & Aiken.)					
204, 648	Aiken, Walter, Franklin, N. H. Narrowing mechanism for knitting-machine	June 11, 1878	231	73	13	1049
205, 167	Same. same	June 25, 1878	805	239	13	1131
	Aikin, William, et al. (See Smith, George E., assignor.)					
201, 377	Aikin, William, and William Whyte Drummond, Louisville, Ky. Machine for molding in sand	Mar. 19, 1878	589	181	13	515
202, 321	Aikin, William, and William W. Drummond, Louisville, Ky. Apparatus for mounting and transporting ladles for molten metal	Apr. 16, 1878	509	149	13	679
202, 322	Same. Sand-molding machine	Apr. 16, 1878	510	149	13	679
200, 012	Aikins, William T., Toronto, Ontario, Canada. Grease-arrester for sinks	Feb. 5, 1878	117	38	13	252
209, 639	Ainsworth, Clark, Monticello, Iowa. Harvester	Nov. 5, 1878	115	33	14	696
201, 161	Aitcheson, Peter and Robert P., Alexandria, Va. Bottle-packing case	Feb. 12, 1878	280	84	13	284
	Aitcheson, Robert P. (See Aitcheson, Peter and Robert P.)					
204, 649	Aitken, Robert W., Buffalo, N. Y. Piston-valve for engine	June 11, 1878	232	73	13	1049
204, 608	Akens, William Harrison, Penn Line, Pa. Harvester-dropper	June 11, 1878	282	88	13	1055
204, 414	Akerhielm, Hugo, assignor of one-half interest to Michael B. Bailey, Chicago, Ill. Wood pavement	June 4, 1878	1	1	13	1013
	Akeroyd, Abraham, et al. (See Shackleton & Binus, assignors.)					
206, 914	Akins, Abraham L., Greensburg, Pa. Treadle	Aug. 13, 1878	282	86	14	245
	Albany Steam Trap Company. (See Blessing, James H., assignor.) (Reissue.)					
208, 278	Albee, Amos, Boston, Mass. Ink-well	Sept. 24, 1878	770	225	14	458
209, 102	Albee, Benjamin, East Boston, Mass. Horse and cattle stall for vessels	Oct. 22, 1878	729	211	14	603
204, 471	Alberdingk, Timotheus Ignatius, Amsterdam, Holland. Rendering apparatus	June 4, 1878	53	17	13	1020
8, 109	Alberger, John L., Buffalo, N. Y. Refrigerating apparatus (Reissue.)	Feb. 26, 1878	979	288	13	406
	Alberger, Mary R. (See Absterdam, John, assignor.) (Reissue.)					
201, 477	Alberger, Morris H., assignor of one-half interest to Silas W. Pettit, Philadelphia, Pa. Insulated telegraph-wire	Mar. 19, 1878	686	210	13	529
201, 860	Alberger, Morris H., Philadelphia, Pa. Eye-bar for bridges, &c.	Apr. 2, 1878	1	1	13	599
199, 677	Albers, Heinrich, Hanover, Prussia. Clothes-mangle	Jan. 29, 1878	1022	298	13	191
205, 168	Same. Mangle	June 25, 1878	806	239	13	1131
209, 206	Albers, Lübke Ufers, Keokuk Junction, Ill. Revolving index	Oct. 22, 1878	842	243	14	617
8, 455	Albertson, Albert, Jersey City, N. J., assignor, by mesne assignments, to self, Simon B. Hunt, and Francis E. Pinto. Method of and apparatus for manufacturing ice (Reissue)	Oct. 15, 1878	724	209	14	597
198, 830	Albertson, Albert, Jersey City, N. J., assignor to Simon Benton Hunt, New York, N. Y. Air-cooling apparatus	Jan. 1, 1878	108	31	13	25
198, 831	Same. Ice-machine	Jan. 1, 1878	109	31	13	25
204, 472	Albertson, Albert, Jersey City, N. J. Bottle-stopper	June 4, 1878	55	17	13	1020
	Albin, George W. (See Lockhart & Albin.)					
	Albree, Robert C. (See Lauderbach, Charles J., assignor.)					
	Albright, Andrew. (See Muchmore, David B., assignor.)					



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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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200, 961	Albro, Charles E., Cortland, N. Y. Hoisting-apparatus .....	Mar. 5, 1878	136	44, 45	13	436
203, 208	Alden, E., <i>et al.</i> (See Prusha, William F., assignor.) .....	July 23, 1878	851	242	14	128
210, 736	Aldred, Samuel, Charlton, England. Railway-rail .....	Dec. 10, 1878	382	{ 104 105 }	{ 14 14 }	{ 881 881 }
208, 877	Aldrich, Thomas, Macclesfield, assignor to John Dendy and John Russell Beard, Manchester, England. Loom for weaving leno .....	Oct. 8, 1878	457	132	14	557
199, 394	Aldrich, E. C. (See Wellington, Darius, assignor.) .....	Jan. 22, 1878	709	209	13	134
199, 487	Aldrich, Harvey C., Norwich, Conn. Revenue-recorder .....	Jan. 22, 1878	795	233	13	148
260, 421	Aldrich, Nathan, Alden, Iowa. Fuel-press .....	Feb. 19, 1878	552	163	13	334
207, 701	Aldrich, Wales, assignor of one-half interest to Dayton Machine Company, Dayton, Ohio. Horse hay-rake .....	Sept. 3, 1878	115	35	14	863
208, 007	Aldrich, Warren, Lowell, Mass. Carpet-fastener .....	Sept. 17, 1878	460	141	14	417
199, 488	Aldrich, William Adellbert, Ingersoll, Mich. Wind-engine .....	Jan. 22, 1878	795	234	13	148
207, 930	Aldridge, Frank C., <i>et al.</i> (See Aldridge, Hiram, assignor.) .....	Sept. 10, 1878	375	114	14	399
210, 443	Aldridge, Hiram, Saint Louis, Mo., assignor to Frank C. Aldridge, Batesburg, S. C., R. B. Crouch, Chicago, Ill., and F. A. Dilworth, Pittsburg, Pa. Car-roof .....	Dec. 3, 1878	55	.....	14	831
199, 951	Alexander, Abram, assignor of one-half interest to Samuel M. Boyd, Pittsburg, and Charles R. Moore, Saint Petersburg, Pa. Ram for opening crevices in oil-wells .....	Feb. 5, 1878	62	20	13	242
208, 947	Alexander, Andrew Jackson, assignor of one-half interest to John Alexander and John W. Cabbage, Gallipolis, Ohio. Leather-dressing machine .....	Oct. 15, 1878	542	159	14	572
201, 586	Alexander, Barton S., San Francisco, Cal. Extracting gases of sewers and consuming same by combustion .....	Mar. 26, 1878	817	249	13	551
207, 931	Alexander, Charles Louis, Beresford L. Osborn, and John G. Anthony, Washington, D. C. Thill-coupling .....	Sept. 10, 1878	376	114	14	399
201, 586	Alexander, Francis M., Marshall, Tex. Car-journal box .....	Mar. 26, 1878	817	249	13	551
207, 931	Alexander, George W. (See McCord & Alexander.) .....	Sept. 10, 1878	376	114	14	399
201, 730	Alexander, George W., Washington, D. C. Door-securer .....	Mar. 26, 1878	817	249	13	551
203, 692	Alexander, Hezekiah, Albany, N. Y. Faucet .....	May 14, 1878	491	139	13	894
208, 053	Alexander, Horace Clifton, New York, N. Y. Lamp-burner .....	Sept. 17, 1878	517	154	14	423
201, 082	Alexander, James, Cherryfork, Ohio. Drag-sawing machine .....	Mar. 12, 1878	265	83	13	463
206, 520	Alexander, James Emmons, Neosho, Mo. Sulky-plow .....	July 23, 1878	1216	350	14	178
205, 028	Alexander, John, <i>et al.</i> (See Kean & Alexander.) .....	June 18, 1878	650	192	13	1105
209, 640	Alexander, John, <i>et al.</i> (See Alexander, Andrew Jackson, assignor.) .....	Nov. 5, 1878	115	34	14	696
206, 759	Alexander, John Lyon, Edenburg, Pa. Joint for oil-well tools .....	Aug. 6, 1878	103	33	14	219
202, 623	Alexander, Julius A., Sulphur Springs, Tex. Churn-motor .....	Apr. 23, 1878	845	243	13	731
198, 923	Alexander, Newton J., Austin, Tex. Paper-bag .....	Jan. 8, 1878	215	61	13	49
206, 289	Alexander, Thomas S., assignor to self and Selah A. Hull, Meriden, Conn. Drawer-pull .....	July 23, 1878	942	266	14	140
199, 892	Alford & Sorley. (See Tucker, Argyle W., assignor.) .....	Feb. 5, 1878	2	1	13	233
200, 238	Alford, William D., Cincinnati, Ohio. Portable-engine truck .....	Feb. 12, 1878	351	105	13	296
200, 595	Algeo, Alexander, New York, N. Y. Hat-pressing machine .....	Feb. 26, 1878	741	217	13	371
201, 861	Alger, Darius, Providence, assignor of one-half interest to Joseph O. Tillinghast, Natick, R. I. Horseshoe .....	Apr. 2, 1878	2	1	13	590
200, 680	Alger, William, Grand Rapids, Mich. Current and tide wheel .....	Feb. 26, 1878	832	245	13	384
206, 209	Alker, John H., assignor to Jones & Laughlins, Pittsburg, Pa. Forging-mandrel .....	July 23, 1878	851	243	14	128
208, 135	Same. Blacksmith's tongs .....	Sept. 17, 1878	601	178	14	434
205, 987	Same. Machine for bending tubular sockets .....	July 16, 1878	592	{ 170 171 }	{ 14 14 }	{ 93 93 }
203, 693	Same. Machine for rolling sucker-rod blanks .....	May 14, 1878	491	139	13	894
201, 378	Allan, George, and James W. Brown, London, England. Telegraph-relay .....	Mar. 19, 1878	589	181	13	515
205, 332	Allan, John C., Buffalo, N. Y. Insecticide .....	June 25, 1878	983	291	13	1154
210, 981	Allard, William H., Washington County, Ohio. Feed-steamer .....	Dec. 17, 1878	674	185	14	927
203, 982	Allbright, A. (See Paine, Edwin L., assignor.) .....	May 21, 1878	806	231	13	942
208, 878	Alleman, Phillip, <i>et al.</i> (See Beecher, William F., assignor.) .....	Oct. 8, 1878	458	132	14	557
206, 518	Allen, Aaron Burr, Barry, Ill. Car-brake .....	July 30, 1878	1215	349	14	178
209, 151	Allen, Almon N., Pittsfield, Mass. Automatic gas-lighting .....	Oct. 22, 1878	787	228	14	610
200, 240	Allen, Augustus L. (See Harris & Allen.) .....	Feb. 12, 1878	353	105	13	296
208, 781	Allen, Benjamin F., Boston, Mass. Dowel-pin .....	Oct. 8, 1878	347	100	14	542
205, 602	Allen, Boyd, assignor to John F. Donnell, Boston, Mass. Oil-fixture for illuminating purposes .....	July 2, 1878	141	43	14	27
200, 013	Allen, Charles A., <i>et al.</i> (See Raymond, William F., assignor.) .....	Feb. 5, 1878	118	39	13	252
203, 869	Allen, Charles B., Philadelphia, Pa. Bolt-heading machine .....	May 21, 1878	806	231	13	942
206, 290	Allen, D. K., <i>et al.</i> (See Phelps, Ira M., assignor.) .....	Oct. 8, 1878	458	132	14	557
210, 737	Allen, Freeman S., and Henry C. Lane, Washington, D. C., said Allen assignor to said Lane. Plier .....	July 30, 1878	1215	349	14	178
209, 207	Allen, George A., West Bay City, Mich. Check-hook for harnesses .....	Oct. 22, 1878	787	228	14	610
200, 814	Allen, George M. (See Parks & Allen.) .....	Feb. 12, 1878	353	105	13	296
203, 573	Allen Governor Company. (See Huntoon, Reuben K., assignor.) .....	Oct. 8, 1878	347	100	14	542
200, 590	Allen, Henry H., Oxford, Mich. Fence-gate .....	July 2, 1878	141	43	14	27
204, 275	Allen, Horatio N., assignor of one-half interest to W. H. Kimball, Norwood, Mass. Nail for boots and shoes .....	Feb. 5, 1878	118	39	13	252
199, 137	Allen, Ira, and Hiram Chandler, Alfordville, Ind., said Allen assignor to said Chandler. Seed-dropper .....	May 21, 1878	686	195	13	926
202, 772	Allen, James Edward, and Patrick Francis Duffy, Greensborough, N. C. Brick-machine .....	July 23, 1878	943	267	14	140
206, 291	Allen, James G. (See Stuart & Allen.) .....	Dec. 10, 1878	384	105	14	882
	Allen, Joseph Bradford, Linesville, Pa. Railway-joint .....	Oct. 22, 1878	843	243	14	617
	Allen, Lane & Scott. (See McNamee, Richard, assignor.) .....	Mar. 5, 1878	1	1	13	415
	Allen, Michael, assignor of one-half interest to Thaddeus H. Walsh, New York, N. Y. Cement and asphaltum pipes .....	May 14, 1878	375	106	13	880
	Allen, Michael, New York, N. Y. Asphaltum or cement pipe .....	Feb. 26, 1878	742	217	13	371
	Allen, Nathaniel R., assignor of one-half interest to Charles W. Woodford, Montreal, Canada. Ice-tongs .....	May 28, 1878	1136	325	13	987
	Allen, Nelson E., Beaver Dam, Wis. Sheep-rack .....	Jan. 15, 1878	443	131	13	85
	Allen, Nicholas I., assignor to Dutcher Temple Company, Hopedale, Mass. Temple for looms .....	Apr. 23, 1878	999	287	13	750
	Allen, Nicholas I., Milford, assignor to George Draper & Sons, Hopedale, Mass. Ring for spinning-machines .....	July 23, 1878	944	267	14	141
	Allen, Norman, assignor of one-half interest to E. H. Lane, Forestville, and E. C. Hamlin, Plainville, Conn. Manufacture of clock-cases .....					
	Allen, Oscar, assignor of one-half interest to W. E. Sargent, Marshalltown, Iowa. Fence-post .....					
	Allen, Richard N., Hudson, N. Y. Exhaust-nozzle of locomotives .....					
	Allen, Richard N., Hudson, N. Y., assignor of one-half interest to James C. Beach, Bloomfield, N. J. Brake-shoe for railway-cars .....					
	Same. Car-axle .....					

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
209, 443	Allen, Samuel J., assignor to self and Herman F. Achauer, Zanesville, Ohio. Brick-kiln	Oct. 29, 1878	1088	317	14	656
200, 681	Allen, Samuel L., Philadelphia, Pa. Cultivator	Feb. 26, 1878	833	245	13	384
208, 008	Same.....Potato-digger	Sept. 17, 1878	470	141	14	417
199, 009	Allen, Silas A., New York, N. Y. Roller-skate	Jan. 8, 1878	300	88	13	62
201, 083	Allen, Stephen M., Duxbury, Mass. Manufacture of paper-pulp from wood	Mar. 12, 1878	266	83	13	463
202, 393	Allen, Stephen W., and Isaac Cook, Tonica, Ill. Boot-upper	Apr. 16, 1878	579	170	13	689
200, 239	Allen, Theodore E., New York, N. Y. Tobacco-package	Feb. 12, 1878	352	105	13	296
209, 789	Allen, Theophilus S., Denver, Colo. Ore-washer	Nov. 12, 1878	284	85	14	723
206, 519	Allen, Walter, Washington, D. C. Shirt	July 30, 1878	1215	{ 349 350 }	14	178
206, 915	Allen, William B., Orleans, N. Y. Bag-holder	Aug. 13, 1878	283	86	14	245
207, 149	Same.....Gate	Aug. 20, 1878	522	157	14	278
207, 473	Same.....Hand-truck	Aug. 27, 1878	872	257	14	328
208, 136	Same.....Seat-lock for vehicles	Sept. 17, 1878	602	178	14	435
209, 371	Same.....Device for preventing boards from warping	Oct. 29, 1878	1017	296	14	045
209, 442	Same.....Sprinkler	Oct. 29, 1878	1018	296	14	045
	Same.....Churn-dasher	Oct. 29, 1878	1087	317	14	656
199, 609	Allen, William C. (See Knight, Luther, assignor.)					
	Allen, William J., New York, N. Y., assignor of one-half interest to Henry Thompson, Jersey City, N. J. Furnace-grate	Jan. 29, 1878	951	277	13	181
8, 188	Allen, William John, Buffalo, N. Y. Condenser for engines	Apr. 23, 1878	1153	331	13	768
206, 210	Allen, William M., Boston, Mass. Sewer-gas trap	July 23, 1878	852	243	14	128
8, 037	Allenwood, Joseph M., Timbuctoo, Cal., assignor, by mesne assignments, to Joseph Craig. Ore-washing apparatus for hydraulic mining	Jan. 15, 1878	651	191	13	117
207, 381	Alley, Albert J., Fond du Lac, Wis. Stump-extractor	Aug. 27, 1878	775	231	14	316
	Ailing, A. H., et al. (See Otis, Samuel L., assignor.)					
209, 849	Ailing, C. B., et al. (See Otis, Samuel L., assignor.)					
	Allington, David K., East Saginaw, Mich. Saw-filing machine	Nov. 12, 1878	347	104	14	731
204, 779	Allis, Thomas V., New York, N. Y. Hasp-lock	June 11, 1878	373	{ 111 112 }	13	1066
206, 020	Same.....Fence-wire	June 18, 1878	651	192	13	1105
209, 790	Same.....Fencing-strip	Nov. 12, 1878	285	85	14	723
	Allison, Cornelius. (See Adams, Samuel E., assignor.)					
207, 702	Allison, Oscar W., Cleveland, Ohio. Paper-bag machine	Sept. 3, 1878	116	36, 37	14	364
206, 067	Allison, Robert, Port Carbon, Pa. Feed-screw and nut for rock-drills, &c.	July 16, 1878	671	194	14	103
	Allison, W. O. (See Waring, John B., assignor.)					
205, 822	Allison, William Clare, Philadelphia, Pa. Railway-track connection	July 9, 1878	404	116	14	64
204, 276	Allonas, Joseph, assignor to Aultman & Taylor Company, Mansfield, Ohio. Clover-hulling attachment for thrashers	May 28, 1878	1138	326	13	987
205, 716	Same.....Spark-arrester	July 9, 1878	287	85	14	49
209, 208	Allonas, Joseph, Mansfield, Ohio. Grain-separator	Oct. 22, 1878	843	243	14	617
210, 738	Allt, Edmund, New York, N. Y. Gate-valve	Dec. 10, 1878	384	105	14	882
204, 874	Allton, Hiram, Columbus, Ohio. Lubricator	June 18, 1878	497	145	13	1085
207, 584	Allyn, Marvin S., Hart's Grove, Ohio. Milk-cooler	Sept. 3, 1878	1	1	14	349
	Allyn, Richard J. (See Stearns, George F., assignor.)					
207, 150	Almond, Thomas R., Brooklyn, N. Y. Scroll-saw attachment to lathes	Aug. 20, 1878	524	157	14	279
	Almy, James F., et al. (See Phillips, Phineas W., assignor.)					
202, 773	Almy, James F., Salem, Mass. Rack for curtain rollers and fixtures	Apr. 23, 1878	1000	288	13	750
203, 694	Arlich, William J., Elkton, Md. Milk-can	May 14, 1878	495	140	13	894
201, 478	Altenburg, Augustus, and Wallace C. Hill, Buffalo, N. Y. Window-screen	Mar. 19, 1878	687	210	13	529
209, 373	Altfather, Henry D., assignor to Cyrus Cort, Maquoketa, Iowa. Furrow-gage staff for dressing mill-stones	Oct. 29, 1878	1020	296	14	645
202, 774	Alton, Richard C., assignor to F. Oden Horstmann, Samuel Clarkson, William P. Ellison, and Walter Horstmann, Philadelphia, Pa., trustees. Machine for covering strands for making bullion	Apr. 23, 1878	1001	288	13	750
8, 503	Alverson, Andrew H., New Haven, Conn., assignor to Gottlob Günther, New York, N. Y. Cattle-fish holder	Nov. 26, 1878	958	279	14	819
	Alverson, Charles T. (See Broad, Charles H., assignor.)					
202, 088	Alvord, Hubbel B., Vineland, N. J. Weather-strip	Apr. 9, 1878	247	73	13	639
209, 541	Alvord, Luther, South Hadley, Mass. Chain wheel-propeller	Nov. 5, 1878	2	1	14	681
207, 932	Alvord, Williston I., Bridgeport, Conn. Surgical dilator	Sept. 10, 1878	377	114	14	400
207, 151	Amat, Francisco, Havana, Cuba. Portable railway	Aug. 20, 1878	525	158	14	279
200, 682	Amazeen, Christopher, Boston, Mass. Leather-skiving machine	Feb. 26, 1878	834	245	13	384
	Amberg, W. A. (See Thompson, Edward H., assignor.)					
	Amberg, William A. (See Hoffman, Austin D., assignor.)					
8, 209	Amberg, William A., Chicago, Ill. Temporary binder	May 7, 1878	301	86	13	862
199, 395	Same.....Letter-file	Jan. 22, 1878	710	200	13	134
208, 220	Same.....Temporary binder for letters and papers	Sept. 24, 1878	702	207	14	451
209, 597	Ambler, Augustin I. and William R., New York, N. Y., assignor, by mesne assignments, to S. M. Whipple, Grantville, Mass. Gas-generator	Nov. 5, 1878	63	19	14	689
210, 591	Ambler, Henry L., Cleveland, Ohio. Window-blind	Dec. 10, 1878	231	63	14	863
	Ambler, William R. (See Ambler, Augustin I. and William R.)					
210, 481	Ambrose, Lycurgus E., Mason City, Ill. Sieve	Dec. 3, 1878	93	23	14	836
	American Buttonhole Overseaming and Sewing-Machine Company. (See Rehfuß, George, assignor.)					
	American Dairy and Commercial Company. (See Freeman, Henry O., assignor.)					
	American Hydrocarbon Gas Company. (See Johnston, James J., assignor.)					
	American Mining and Dredging Company. (See Moreau, Eugene, assignor.)					
	American Paper Barrel Company. (See Laraway, George W., assignor.)					
	American Propeller Company. (See Mallory, William H., assignor.)					
	American Ring Company. (See Atwood, Walter S., assignor.)					
	Same.....(See Tucker, George W., assignor.)					
	American Screw Company. (See Rogers, Charles D., assignor.)					
	American Shearer Manufacturing Company. (See Smith, Roswell T., assignor.)					
	American Ship Windlass Company. (See Henthorn & Thayer, assignors.)					
	Same.....(See Manton, Joseph P., assignor.)					
	Same.....(See Remington & Manton, assignors.)					
	American Watch Company. (See Woerd, Charles V., assignor.)					
204, 277	Ames, Adelbert, Northfield, Minn. Grain-decorating apparatus	May 28, 1878	1139	326	13	987
206, 916	Ames, Charles H., Union City, Pa. Fire-escape	Aug. 13, 1878	284	86	14	245
	Ames, Daniel T., et al. (See Day, Joshua D., assignor.)					
203, 100	Ames, David J. and Ezra J., Austin, Minn. Grinding-mill	Apr. 30, 1878	1340	390	13	797
	Ames, Ezra J. (See Ames, David J. and Ezra J.)					

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
206, 159	Ames, Gillman H., Adrian, Mich. Car-coupling.....	July 23, 1878	791	227	14	121
	Ames, Josiah, <i>et al.</i> (See Button, Alphonzo, assignor.)					
	Ames, Oliver. (See Calef, Joseph Warren, assignor.)					
199, 248	Ames, Theodore George, Denton, Tex. Apparatus for preserving meat, &c.....	Jan. 15, 1878	546	161	.....	101
200, 962	Amesbury, George W., Chicago, Ill. Specie pocket-book.....	Mar. 5, 1878	137	45	13	437
204, 473	Amess, James, Rosemount, Ontario, Canada. Fire-escape.....	June 4, 1878	55	18	13	1020
201, 379	Amidon, Charles H., assignor of one-half interest to E. K. Saxton, Buffalo, N. Y. Bit-brace.....	Mar. 19, 1878	590	181	13	515
210, 075	Amidon, Charles H., Buffalo, N. Y. Bit-brace.....	Nov. 19, 1878	599	178	14	768
	Amis, Garret. (See Rowen & Amis.)					
200, 597	Amish, William C., Lumberton, N. J. Hydrant sewer-trap.....	Feb. 26, 1878	743	217	13	371
204, 699	Ammel, Martin, Belleville, Ill. Road-grader.....	June 11, 1878	283	88	13	1056
202, 213	Amnden, Noah C., Dubuque, Iowa. Fastening for egg-carriers.....	Apr. 9, 1878	377	111	13	656
201, 084	Amwake, William F. H., assignor of one-half interest to William B. Wiley, Lancaster, Pa. Padlock.....	Mar. 12, 1878	268	83	13	463
	Amy, Orin H., <i>et al.</i> (See Stone, Sargeant H., assignor.)					
	Anchor Fork Company. (See Harter, John H., assignor.)					
200, 963	Anders, George L., Boston, assignor to E. Baker Welch, Cambridge, Mass. Magneto-signal apparatus.....	Mar. 5, 1878	138	45	13	437
210, 890	Same.....Printing-telegraph.....	Dec. 17, 1878	562	157	14	914
210, 891	Same.....same.....	Dec. 17, 1878	564	158	14	914
210, 892	Same.....same.....	Dec. 17, 1878	566	158	14	914
210, 893	Same.....same.....	Dec. 17, 1878	569	158	14	914
210, 894	Same.....same.....	Dec. 17, 1878	571	159	14	915
210, 895	Same.....same.....	Dec. 17, 1878	574	159	14	915
210, 896	Same.....same.....	Dec. 17, 1878	575	159	14	915
210, 897	Same.....Transmitter for printing-telegraph.....	Dec. 17, 1878	579	160	14	916
	Anderson, Alexander. (See Nesbitt & Anderson.)					
207, 474	Anderson, Elijah, Mount Pleasant, Iowa. Hog-cholera compound.....	Aug. 27, 1878	873	.....	14	328
	Anderson, Frank. (See Anderson, Homer and Frank.)					
204, 875	Anderson, Frank, Peekskill, N. Y. Suspension hook.....	June 18, 1878	498	145	13	1085
210, 001	Anderson, Hansford, West Point, Va. Bag tag and fastener.....	Nov. 19, 1878	520	156	14	758
210, 739	Anderson, Homer and Frank, Peekskill, N. Y. Type-writing machine.....	Dec. 10, 1878	385	105	14	882
203, 870	Anderson, John A., Chicago, Ill. Tea-case.....	May 21, 1878	687	195	13	926
199, 679	Anderson, John W., Greene, Pa. Clip-iron for carriages.....	Jan. 29, 1878	1023	298	13	191
	Anderson, John Wesley. (See Mellinger, Christian K., assignor.)					
204, 519	Anderson, Joseph, and August Sperber, Pittsburg, Pa. Lift for glass-molds.....	June 4, 1878	93	31	13	1026
204, 876	Anderson, Laing, Corseley, Ontario, Canada. Musical transposing-board.....	June 18, 1878	499	145	13	1085
200, 964	Anderson, Lauritz, Chicago, Ill. Toy musical instrument.....	Mar. 5, 1878	139	45	13	437
205, 230	Anderson, Leonard, assignor to self and Charles A. Avery, Painesville, Ohio. Machine for cutting veneers.....	June 25, 1878	871	258	13	1139
	Anderson, Levi. (See Nix, Stone & Anderson.)					
	Anderson, Oliver. (See Rude, Peter H., assignor.)					
201, 979	Anderson, Samuel G., Cincinnati, Ohio. Automatic cut-off valve for water-tanks, &c.....	April 2, 1878	115	34	13	616
204, 278	Anderson, Walter, Brooklyn, N. Y. Gas-burner.....	May 28, 1878	1140	326	13	987
	Anderson, William B. (See Krutzsch, William, assignor.)					
207, 703	Anderson, William Green, Mexia, Tex. Bale-tie.....	Sept. 3, 1878	121	37	14	364
210, 482	Andren, Alban, Beverly, Mass. Hoop-fastener.....	Dec. 3, 1878	93	24	14	836
202, 975	Andres, Stephen R., Philadelphia, Pa. Article of food from beans.....	Apr. 30, 1878	1225	.....	13	782
8, 048	Andrew, William E., New York, N. Y. Artificial butter.....(Reissue.)	Jan. 22, 1878	937	.....	13	170
	Andrews, A. Milton. (See Curtis & Andrews.)					
205, 980	Andrews, Abram W., assignor to Elizabeth Requa, Brooklyn, N. Y. Splitting and shaping stone by machinery.....	July 16, 1878	594	171	14	93
198, 832	Andrews, Albert L., Providence, R. I. Hitching-bar.....	Jan. 1, 1878	110	31	13	26
	Andrews, Alfred H., <i>et al.</i> (See Mallett, Francis W., assignor.)					
	Andrews, Charles W., <i>et al.</i> (See Stone, Sargeant, assignor.)					
	Andrews, David, <i>et al.</i> (See Sleeper, Charles T., assignor.).....(Reissue.)					
204, 182	Andrews, Edwin F., assignor of one-third interest to Thaddeus S. Smith, Saint Louis, Mo. Brick-kiln.....	May 28, 1878	1049	297	13	975
206, 760	Andrews, Emanuel, Williamsport, Pa. Saw-frame.....	Aug. 6, 1878	104	33	14	220
203, 810	Andrews, Emery, Kennebunk, Me. Coloring and sizing leather or paper-board.....	May 21, 1878	629	177	13	919
199, 172	Andrews, Henry K., Decatur, Tex. Band-cutting feeder for thrashing-machines.....	Jan. 15, 1878	377	141	13	90
	Andrews, Herbert L., <i>et al.</i> (See Mallett, Francis W., assignor.)					
199, 396	Andrews, James B., Jersey City, N. J. Draft apparatus for stoves, &c.....	Jan. 22, 1878	711	209	13	134
210, 740	Andrews, James B., New York, N. Y. Artificial-draft apparatus.....	Dec. 10, 1878	388	106	14	882
203, 871	Andrews, Mathew Allen, Willsburg, Iowa. Draft-equalizer.....	May 21, 1878	687	196	13	926
199, 678	Andrews, Thomas A., and Alfred G. Edwards, Gainesville, Tex. Bale-tie.....	Jan. 29, 1878	1023	298	13	191
205, 988	Andrews, Thomas B., assignor of two-thirds interest to John D. Moritz and Henry Keidel, Baltimore, Md. Manufacture of pistol-springs.....	July 16, 1878	593	.....	14	93
201, 641	Androvatt, Jacob W., Prince's Bay, N. Y. Chimney-cowl.....	Mar. 26, 1878	874	206	13	559
207, 704	Andruss, William H., Brooklyn, N. Y. Brush and blacking-box holder.....	Sept. 3, 1878	122	38	14	364
206, 292	Anglemire, Robert, Rockford, Ill. Shoe.....	July 23, 1878	944	267	14	141
205, 333	Anthoine, Alfred W., Minot, Me. Vehicle-hub.....	June 25, 1878	984	291	13	1154
206, 293	Same.....Vehicle-hub wrench.....	July 23, 1878	945	268	14	141
	Anthoine, James W. (See Rose, Truman H., assignor.)					
201, 587	Anthoine, James W., Millar's Falls, Mass. Friction-clutch for lathes, &c.....	Mar. 26, 1878	818	249	13	551
199, 680	Anthoine, Louis, Epworth, Iowa. Cultivator.....	Jan. 29, 1878	1025	299	13	191
	Anthony & Co., E. and H. T. (See Lewis, William H., assignor.)					
	Same.....(See Pearsall, G. Frank E., assignor.)					
	Same.....(See Stoddard, Isaac H., assignor.)					
	Same.....(See Wheeler & Bazin, assignors).....(Reissue.)					
199, 397	Anthony, Edmund, assignor of one-half interest to Henry Q. Hawley, Albany, N. Y. Rotary fluid meter and motor.....	Jan. 22, 1878	712	210	13	135
199, 173	Anthony, Jacob J., Sharon Springs, N. Y. Car-coupling.....	Jan. 15, 1878	478	141	13	90
206, 697	Same.....Locomotive.....	Aug. 6, 1878	42	12, 13	14	211
209, 209	Same.....same.....	Oct. 22, 1878	845	244	14	618
	Anthony, John G. (See Alexander, Osborn & Anthony.)					
	Anthony, Joseph S. (See Pope & Anthony.)					
	Anthony, R. C. (See Klec, John, assignor.).....(Reissue.)					
	Antisdale, Julius O. (See Brunson, Sterne, assignor.)					
	Antrim, Jacob S. (See Unger, Hiram, assignor.)					
210, 483	Antunes, Jose Antonio, Rio de Janeiro, Brazil, assignor to John W. Coachman; said Coachman assignor of one-half interest to John W. Selby, Baltimore, Md. Coffee-pot.....	Dec. 3, 1878	94	24	14	836

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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210, 394	Apel, Herman C., Milwaukee, Wis. Hydrant.	Dec. 3, 1878	5	1	14	825
203, 574	Appenzeller, John C., Cincinnati, Ohio. Apparatus for making vinegar.	May 14, 1878	375	106	13	880
208, 137	Applebaugh, William K. (See Van Hoerenbergh & Applebaugh.)					
210, 741	Appleby, John F., De Pere, Wis. Grain-binder.	Sept. 17, 1878	603	179	14	435
207, 837	Appleton, Walter S., New York, N. Y. Plate-printing press.	Dec. 10, 1878	388	106	14	882
203, 983	Arbeiter, Joseph, Hartford, Conn. Broom.	Sept. 10, 1878	271	84	14	386
210, 484	Archer, Charles S. (See Broome & Archer.)					
203, 983	Archer, George W., Rochester, N. Y. Barber and dental chair.	May 21, 1878	807	232	13	942
210, 484	Same. Dental spittoon.	Dec. 3, 1878	95	24	14	836
203, 531	Archibald, Nelson, Hanford, Cal. Device for unloading header-wagons.	June 25, 1878	872	258	13	1139
200, 014	Arendell, Richard Lewis, assignor of one-half interest to John McPherson, Rochester, Ky. Stone-cutting tool.	Feb. 5, 1878	119	39	13	252
209, 210	Argerbright, Daniel, Troy, N. Y. Wheel-cultivator.	Oct. 22, 1878	840	244	14	618
8, 202	Arkell, James and Benjamin, and Adam Smith, Canajoharie, N. Y. Paper bag. (Re-issue.)	Apr. 30, 1878	1485	435	13	815
204, 780	Arkell, James, Canajoharie, N. Y. Paper bag.	June 11, 1878	375	112	13	1066
207, 933	Same. Bag and sack.	Sept. 10, 1878	378	114	14	400
208, 138	Same. Bag.	Sept. 17, 1878	604	179	14	435
209, 315	Same. Paper bag.	Oct. 29, 1878	953	279	14	637
209, 316	Same. same.	Oct. 29, 1878	955	279	14	637
209, 538	Same. same.	Oct. 29, 1878	1193	346	14	670
209, 850	Annin, James, Le Roy, N. Y. Spring-hook for check-reins.	Nov. 12, 1878	348	104	14	731
210, 982	Armit, Robert Henry, assignor to William C. Hallett, London, England. Screw-propeller.	Dec. 17, 1878	675	186	14	927
208, 279	Armor, A. H., et al. (See Powers, J. W., assignor.)					
210, 286	Armor, William Hugh, McKeesport, Pa. Vehicle-wheel hub.	Sept. 24, 1878	771	225	14	459
208, 782	Armstrong, Charles, Russell G. Woodward, and Lorenz Muther; said Woodward assignor to E. P. Weber, Chicago, Illinois. Combined dating and canceling stamp.	Nov. 26, 1878	835	246	14	803
208, 782	Armstrong, Charles N., Montreal, Canada, assignor of one-half interest to William G. Warden, Philadelphia, Pa. Preserving meats.	Oct. 8, 1878	347		14	542
206, 850	Armstrong, Daniel. (See Hutchinson & Armstrong.)					
200, 497	Armstrong, Daniel S., Hampden, Md. Material for roofing and building purposes.	Aug. 13, 1878	213	69	14	237
210, 502	Armstrong, Edward, assignor to self and J. R. Hutchinson, Allegheny, Pa. Device for indicating and automatically regulating the temperature of apartments.	Feb. 19, 1878	624	184	13	345
210, 502	Armstrong, Elvin, Jerseyville, Ill. Bee-hive.	Dec. 10, 1878	232	63	14	863
202, 394	Armstrong, Frank. (See Coester & Moore, assignors.) (Reissue.)					
205, 334	Same. (See Vinton & Fitzpatrick, assignors.)					
210, 830	Same. (See Vinton, John H., assignor.)					
202, 394	Armstrong, Frank, Bridgeport, Conn. Stocking-supporter.	Apr. 16, 1878	579	170	13	689
205, 334	Same. Clasp.	June 25, 1878	985	291	13	1154
205, 990	Armstrong, George and Robert, executors of James Armstrong, jr., deceased, Elmira, Ill.; said Robert Armstrong assignor to said George Armstrong. Gang-plow.	Dec. 17, 1878	487	137	14	905
205, 990	Armstrong, George C., Brooklyn, N. Y. Wood-screw.	July 16, 1878	594	171	14	93
205, 990	Armstrong, James, jr., deceased. (See Armstrong, George and Robert, executors.)					
202, 976	Armstrong, John C., et al. (See Wheeler, Marshal, assignor.)					
201, 642	Armstrong, Robert, executor. (See Armstrong, George and Robert.)					
201, 642	Armstrong, Robert, Portland, New Brunswick, Canada. Sled.	Apr. 30, 1878	1226	354	13	783
201, 479	Armstrong, William Edward, and David Giesman, Ludington, Mich. Clothes-pounder.	Mar. 26, 1878	874	266	13	559
210, 831	Armstrong, Willis, and James Hull Brown, Monticello, Ill. Check-row-planter attachment.	Mar. 19, 1878	688	210	13	529
209, 374	Arnold, Daniel, assignor to George W. Gardner, Cleveland, Ohio. Bag-holder.	Dec. 17, 1878	488	137	14	905
203, 575	Arnold, William D., Jefferson County, Colo. Sulky-plow.	Oct. 29, 1878	1020	296	14	645
198, 806	Arno, John, Sullivan Township, Sharp County, Ark. Gate.	May 14, 1878	376	106	13	880
209, 152	Arnold, Oliver H., Somerville, Mass. Mechanical musical instrument.	Jan. 1, 1878	145	42	13	31
210, 487	Arnold, Alonzo C., and John H. Aiken, Norwalk, Conn. Filling-mill.	Oct. 22, 1878	787	228	14	610
203, 984	Arnold, David G. (See Stark, George W., assignor.)	Dec. 3, 1878	96	24	14	836
203, 984	Arnold, Eliphaz W., et al. (See Robbins, Joseph A., assignor.)					
203, 851	Arnold, Horace L., assignor of one-half interest to William T. and William H. Powers, Grand Rapids, Mich. Piston water-meter.	May 21, 1878	808	232	13	942
202, 775	Arnold, Hudson H. C., Lebanon, Tenn. Cover for goblet or cup.	Nov. 12, 1878	349	104	14	731
201, 480	Arnold, James, Philadelphia, Pa. Ready-cut blank for election-stickers.	Apr. 23, 1878	1002	288	13	750
204, 518	Arnold, John, Newark, N. J. Trunk-lock.	Mar. 19, 1878	680	211	13	529
205, 335	Same. Washing-machine.	June 4, 1878	92	31	13	1025
204, 183	Same. Trunk-catch.	June 25, 1878	985	291	13	1154
210, 742	Arnold, Lloyd, Galveston, Tex. Bale-tie.	May 28, 1878	1051	298	13	976
201, 902	Arnold, Rollin H., Honeyo, N. Y. Spindle attachment for vehicle axletrees.	Dec. 10, 1878	389	106	14	882
204, 938	Arnold, Samuel, Silver Springs, Tenn. Clothes-wringer.	Apr. 2, 1878	44	12	13	605
205, 336	Arnold, Satterlee, Lansingburg, N. Y. Device for washing piece-goods.	June 18, 1878	563	164	13	1093
208, 505	Same. Stopping mechanism for knitting-machine.	June 25, 1878	986	292	13	1154
207, 638	Arnold, Thomas, Versailles, Ill. Hog-cholera compound.	Oct. 1, 1878	49		14	496
201, 380	Arnold, William W., and John T. McGuire, Whitehall, Ill. Drying-car for drain-tiles, bricks, &c.	Sept. 3, 1878	57	17	14	356
205, 633	Arntzen, Bernard, et al. (See Verniaud, Claudius, assignor.)					
205, 633	Artaud, Theodore, Jackson, Miss. Valve-action for brass musical instruments.	Mar. 19, 1878	591	181	13	515
205, 462	Arthur, Charles M., assignor of one-half interest to Richard R. Colburn, Ansonia, Conn. Paper box.	July 2, 1878	142	44	14	27
205, 462	Arthur, James. (See Carr & Arthur.)					
200, 068	Arthur, Robert, Baltimore, Md. Dental tool.	July 2, 1878	1	1	14	9
206, 321	Arzheimer, Jacob, et al. (See Roberts, Edward J., assignor.)					
199, 249	Asbach, Joseph, Chemnitz, Saxony. Loom for weaving wire fabrics.	July 16, 1878	671	194	14	103
204, 320	Asbury, Daniel, Charlotte, N. C. Drying apparatus.	July 30, 1878	1217	350	14	178
205, 030	Asbury, William S., Olney, assignor of one-half interest to Halbert J. Strawn, Albion, Ill. Lamp-extinguisher.	Jan. 15, 1878	547	161	13	101
204, 320	Asche, C. Fritz, Hamburg, Germany. Troches.	June 4, 1878	94		13	1026
205, 030	Ash, Henry Clark, 315 Oxford street, Middlesex County, England. Apparatus for shuffling cards.	June 18, 1878	652	192	13	1105
202, 323	Ashbaugh, D. B., et al. (See Gillen, William S., assignor.)					
205, 337	Ashcroft, Edward H. (See Sullivan, Daniel, assignor.)					
202, 323	Ashcroft, John, assignor to Sarah J. Ashcroft, Brooklyn, N. Y. Furnace-grate.	Apr. 16, 1878	511	149	13	679
205, 337	Ashcroft, John, assignor to Sarah Jane Ashcroft, Brooklyn, N. Y. Furnace-door.	June 25, 1878	988	292	13	1154

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. E.	Vol.	Page.
208, 356	Ashcroft, John, Brooklyn, N. Y. Square revolving grate-bar .....	Sept. 24, 1878	847	247	14	469
208, 357	Same Grate-bar .....	Sept. 24, 1878	848	248	14	469
204, 415	Ashcroft, Sarah J. (See Ashcroft, John, assignor.)					
204, 415	Asher, Howard B. and Milton C., Trenton, Mo. Machine for cutting sheet-metal .....	June 4, 1878	2	1	13	1013
208, 280	Asher, Milton C. (See Asher, Howard B. and Milton C.)					
208, 280	Ashford, Henry, Philadelphia, Pa. Boat-detaching apparatus .....	Sept. 24, 1878	772	226	14	450
208, 054	Ashley, Amos H., Stuyvesant Falls, N. Y. Pump .....	Sept. 17, 1878	518	154	14	423
208, 356	Ashley, James N., et al. (See Pope, Frank L., assignor.) (Reissue.)					
208, 356	Ashley, John Thomas, Brooklyn, N. Y. Bronzing-machine .....	Sept. 24, 1878	849	248	14	469
	Ashmead, Austin T. (See White & Ashmead.) (Reissue.)					
	Ashmore, David N. (See Gibbons & Ashmore.)					
8, 211	Ashmore, John I. (See Bancroft & Ashmore.)					
200, 110	Ashton, Henry G., Boston, Mass., assignor, by mesne assignments, to Ashton Valve Company, Hartford, Conn. Safety-valve attachment to utilize escape-steam. (Reissue.)	May 7, 1878	302	87	13	802
201, 862	Ashton, Henry G., Somerville, Mass., assignor to Ashton Valve Company, Hartford, Conn. Safety-valve .....	Feb. 12, 1878	239	73	13	279
201, 862	Same Exhaust mechanism for locomotives and other steam-engines .....	Apr. 2, 1878	5	1	13	599
	Ashton Valve Company. (See Ashton, Henry G., assignor.) (Reissue.)					
	Same .....					
203, 101	Same (See Wortman, Peter C., assignor.) (Reissue.)					
209, 211	Ashton, William, Hincley, Ill. End-gate for grain-wagons .....	Apr. 30, 1878	1341	390	12	798
202, 505	Asire, Cyrus F., Saltillo, Ohio. Lifting-jack .....	Oct. 22, 1878	847	244	14	618
201, 215	Ask, Justus, Salem, Ohio. Chair .....	Apr. 16, 1878	683	201	13	704
208, 555	Askew, John A. J., Colerain, N. C. Flat-iron heater .....	Mar. 12, 1878	396	122	13	482
204, 700	Asper, Benjamin F., and Robert Magill, Pittsburg, Pa. Apparatus for boring oil-wells.	Oct. 1, 1878	97	29	14	502
201, 216	Aspinwall, George, and Fayette C. Clark, Hartford, Conn. Axle-tree washer .....	June 11, 1878	284	88	13	1056
210, 832	Aston, James, Hythe, England. Breech-loading fire-arm .....	Mar. 12, 1878	397	122	13	482
	Atherton, Abel S. (See Whitehead & Atherton.)					
210, 832	Atherton, Robert, assignor of one-half interest to Will Hague, Paterson, N. J. Steam-blower .....	Dec. 17, 1878	488	137	14	905
210, 832	Same Steam-flue cleaner .....	Dec. 17, 1878	489	138	14	905
199, 174	Atkin, Robert, Iowa City, Iowa. Neck-yoke and combined draft tongue and equalizer.	Jan. 15, 1878	479	141	13	91
201, 481	Atkins, Arthur R., et al. (See Spear, Thomas, assignor.)					
210, 076	Atkins, George W., Milton, Del. Saw-set .....	Mar. 19, 1878	689	211	13	529
200, 241	Same Saw-file holder and gage .....	Nov. 19, 1878	600	179	14	768
209, 744	Atkinson, Francis Marion, Falkland, N. C. Vehicle-hub .....	Feb. 12, 1878	354	105	13	296
204, 781	Atkinson, Frederick G., Suffolk, Va. Barrel-stave .....	Nov. 12, 1878	237	71	14	117
204, 782	Atkinson, Henry, Etchemin, Quebec, Canada. Machine for planing timber .....	June 11, 1878	377	112	13	1066
202, 917	Same Circular-saw mill .....	June 11, 1878	378	113	13	1067
206, 936	Atkinson, James, assignor of one-half interest to Pierre Aimable Victor Le Lubez, London, England. Apparatus for heating water and other fluids.	Apr. 30, 1878	1169	337	13	775
202, 395	Atkinson, Mahlon B., Sharpsburg, Md., assignor of two-thirds interest to William Cammack and George W. Decker, Washington, D. C. Grinding-mill .....	Aug. 13, 1878	358	110	14	254
	Atkinson, Thomas. (See Mayo & Atkinson.)					
202, 395	Atkinson, Thomas Dawson. (See Howard & Atkinson.)					
200, 120	Atkinson, William H., New York, N. Y., assignor to Samuel S. White, Philadelphia, Pa. Shaft-journal and box therefor .....	Apr. 10, 1878	580	170	13	689
205, 781	Atlantic Refining Company, et al. (See Perkins, George H., assignor.)					
209, 542	Atlee, Samuel, et al. (See Stewart, Edward, assignor.)					
206, 851	Atterbury, Thomas B., Pittsburg, Pa. Metal-lipped glass vessel .....	Feb. 12, 1878	240	73	13	279
205, 991	Same Manufacture of glassware .....	July 9, 1878	356	103	14	57
206, 761	Same Combined lamp chimney and shade .....	Nov. 5, 1878	4	2	14	681
208, 880	Atwater, Henry W., Newton, Mass. Clamp .....	Aug. 13, 1878	214	69	14	237
208, 702	Atwater, John B., Geneva, Ill. Street-car propeller .....	July 16, 1878	595	171	14	93
199, 138	Atwater, Richard M., Millville, N. J., assignor to James Whitall, Robert P. Smith, John Mickle, Jr., Charles Roberts, William H. Nicholson, and Charles A. Tatum, Philadelphia, Pa., and New York, N. Y. Glory-hole furnace for finishing glassware.	Aug. 6, 1878	104	33	14	220
207, 234	Atwood, Anson, Duncellen, N. J. Device for muffling railway-rails .....	Oct. 15, 1878	467	135	14	563
202, 978	Atwood, Anson L., assignor to E. Ingraham & Co., Bristol, Conn. Lock-work for clock-movements .....	Oct. 8, 1878	264	75	14	532
200, 015	Atwood, Benjamin S., Abington, Mass. Box-fastener .....	Jan. 15, 1878	444	131	13	85
206, 917	Atwood, Benjamin S., South Abington, Mass. Seal-lock for packing-boxes .....	Aug. 20, 1878	611	183	14	290
206, 918	Atwood, John E., Stonington, Conn. Machine for straightening shafting .....	Apr. 30, 1878	1227	355	13	782
209, 598	Atwood, Lewis J., assignor to Plume & Atwood Manufacturing Company, Waterbury, Conn. Lamp-burner .....	Feb. 5, 1878	120	39	13	252
	Same Lantern .....	Aug. 13, 1878	285	87	14	245
	Same .....	Aug. 13, 1878	286	87	14	245
205, 604	Atwood, Walter S., assignor to self and American Ring Company, Waterbury, Conn. Umbrella-tip cup .....	Nov. 5, 1878	66	19	14	689
202, 624	Atwood, William Q. (See Brown, Malachi, assignor.)					
202, 624	Auchincloss, William T., Wilmington, Del. Machine for turning tree-nails .....	July 2, 1878	142	44	14	27
200, 412	Augsburger, John, Trenton, Ohio. Colter for plows .....	Apr. 23, 1878	846	243	13	731
	Aulabaugh, Crume & Co. (See Aulabaugh, Peter M., assignor.)					
	Aulabaugh, Peter M., assignor to Aulabaugh, Crume & Co., Dayton, Ohio. Paper dish.	July 30, 1878	1102	315	14	164
	Aultman & Co. C. (See Miller, Cassius M., assignor.)					
	Aultman & Taylor Company. (See Allonas, Joseph, assignor.)					
203, 811	Same (See Ogden, Ferris, assignor.)					
200, 121	Austin, Adrian H., Guttenberg, N. J. Machine for making, paring, and building tiles.	May 21, 1878	630	177	13	919
203, 812	Austin, Alvah C., assignor to Anthony Chabot, Oakland, Cal. Hydrant .....	Feb. 12, 1878	241	73	13	279
203, 085	Same Oscillating water-meter .....	May 21, 1878	632	178	13	919
200, 211	Same Water-gate or stop-valve .....	May 21, 1878	811	233	13	942
	Austin, Charles D., Amsterdam, N. Y. Liquid-measure .....	July 23, 1878	852	243	14	128
204, 279	Austin, Cyrus B. (See Austin, Milton S. and Cyrus B.)					
204, 122	Austin, Cyrus P., Boston, Mass. Railway-gate .....	May 28, 1878	1141	326	13	983
	Same .....			327		
207, 095	Austin, Dinsmore, assignor of one-half interest to Ezra T. Dufer and Jedediah Knotts, Murray, Iowa. Weather-strip .....	May 28, 1878	979	279	13	967
200, 103	Austin, Dinsmore, assignor of two-thirds interest to Jedediah Knotts and D. O. Dufur, Murray, Iowa. End-gate for wagons .....	Aug. 20, 1878	475	143	14	273
209, 104	Austin, Elijah H., New York, N. Y. Vitreous lining for pipe-connections .....	Oct. 22, 1878	730	211	14	603
	Same Main and pipe .....	Oct. 22, 1878	731	211	14	603



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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dis.	Vol.	Page.
204, 939	Austin, Ephraim Henry. (See Morris & Austin.)					
198, 785	Austin, Henry W., and William B. Hosford, Chicago, Ill. Furnace	June 18, 1878	565	165	13	1094
199, 681	Austin, Matthew Jones, Bonham, Tex. Ditching-machine.	Jan. 1, 1878	69	18	13	18
205, 463	Austin, Milton S. and Cyrus B., Cuba, Ohio. Gate	Jan. 29, 1878	1026	299	13	191
200, 683	Austin, Rufus, and William H. Gardiner, Howardsville, Ill. Fender	July 2, 1878	2	1	14	9
203, 695	Austin, Stephen J., Litchfield, Ill. Platform-scales	Feb. 26, 1878	835	245	13	384
202, 977	Austin, Truman, Virginia City, Nev. Washing-machine.	May 14, 1878	496	140	13	895
207, 337	Austin, William B., New York, N. Y. Ventilator for chimneys	Aug. 30, 1878	1226	354	13	782
208, 139	Austin, William J., Chicago, Ill. Feed-water heater and filter	Aug. 27, 1878	729	219	14	311
	Austin, William P., New York, N. Y. Water-trap for waste-pipes	Sept. 17, 1878	606	179	14	435
	Automatic Boiler and Engine Company. (See Mather, Thomas W., assignor.)					
	Same. (See Trowbridge, William P., assignor.)					
203, 312	Averill Paint Company. (See Stevens, George L., assignor.)					
	Avers, Herbert Markham, Chicago, Ill. Combined cake-cutter and nutmeg-grater	May 7, 1878	84	24	13	831
	Avery, B. F., & Sons. (See Wiard & Avery, assignors.)					
	Avery, Charles A. (See Anderson, Leonard, assignor.)					
	Avery, Charles A., et al. (See Ellsworth, Henry G., assignor.)					
	Avery, Cyrus M. (See Avery, Robert H., assignor.)					
	Avery, Daniel J., et al. (See Kirby, James A., assignor.)					
	Avery, George C. (See Wiard & Avery.)					
208, 703	Avery, Henry, Burlington, Iowa. Transplanter	Oct. 8, 1878	265	76	14	532
206, 069	Avery, Homer A., Maryville, Mo. Plow and grain-drill	July 16, 1878	672	194	14	103
	Avery, John G. (See Tucker, William, assignor.)					
202, 776	Avery, John Porter, assignor of one-half interest to Ansel Clark, Norwich, Conn. Heating apparatus	Apr. 23, 1878	1003	288	13	750
199, 344	Avery, Robert H., assignor of one-half interest to Cyrus M. Avery, Galesburg, Ill. Corn-planter	Jan. 15, 1878	647	189	13	117
202, 625	Same. . . . . same	Apr. 23, 1878	847	243	13	731
205, 031	Same. . . . . Axle-arms for vehicle-wheels	June 18, 1878	653	192	13	1106
201, 085	Avery, William H., Cherokee, Ala. Key-hole guard	Mar. 12, 1878	269	83	13	463
	Avril, Ferdinand. (See Kuessner & Avril.)					
209, 792	Axe, William R., Rockton, Ill. Paint-mill	Nov. 12, 1878	287	85	14	723
209, 852	Axt, August, Philadelphia, Pa. Refrigerator	Nov. 12, 1878	350	104	14	732
203, 696	Aya, Louis, Winona, Minn. Shoe-lace fastener	May 14, 1878	497	141	13	895
207, 382	Ayer, John M., Chicago, Ill. Ice-grate for refrigerators	Aug. 27, 1878	775	231	14	316
207, 838	Ayer, Latham H., Keokuk, Iowa. Steam cooking apparatus	Sept. 10, 1878	271	84	14	386
209, 791	Ayers, Joseph, Kenton, Ohio. Fountain-pen	Nov. 12, 1878	286	85	14	723
205, 519	Ayers, Mary P., San Francisco, Cal. File-guard	July 2, 1878	50	17	14	16
210, 154	Ayers, Wilson D., assignor of one-half interest to Daniel M. Mackey, Elmira, N. Y. Attachment for lawn-mower	Dec. 10, 1878	300	82	14	871
207, 152	Ayliffe, George, assignor of one-half interest to Joseph Hugill, Akron, Ohio. Oatmeal-machine	Aug. 20, 1878	525	158	14	279
210, 898	Ayres, Jared A., Mystic River, Conn. Oscillating water-meter	Dec. 17, 1878	581	160	14	916
	Ayres, S. P. (See Oliver, Milton B., assignor.)					
200, 815	Ayres, William, Saint Peter's, Pa. Boiler-furnace	Mar. 5, 1878	2	1	13	415
202, 324	Azbill, Wilson K., Columbia, Ky. Sash-balance	Apr. 16, 1878	512	150	13	679
202, 026	Same. . . . . Motor	Apr. 23, 1878	848	244	13	731
202, 134	Babbitt, Benjamin T. (See Cullen, Thomas, assignor.)					
202, 135	Babbitt, Benjamin T., New York, N. Y. Rotary engine	Apr. 9, 1878	295	87	13	645
202, 689	Same. . . . . Centrifugal machine	Apr. 9, 1878	295	87	13	645
203, 986	Same. . . . . Steam-boiler	Apr. 23, 1878	910	262	13	738
203, 987	Same. . . . . same	May 21, 1878	812	233	13	943
204, 783	Same. . . . . same	May 21, 1878	814	233	13	943
209, 014	Same. . . . . Ingot-mold	June 11, 1878	379	113	13	1067
	Same. . . . . Air-gun	Oct. 15, 1878	617	179	14	582
199, 010	Babbitt, B. T. (See Pollock, Julius L., assignor.)					
	Babbitt, S. William, assignor to Wilcox Silver Plate Company, West Meriden, Conn. Covered butter-dish	Jan. 8, 1878	301	88	13	62
199, 772	Same. . . . . Covered dish	Jan. 29, 1878	1108	325	13	205
204, 784	Babbitt, S. William, assignor to Wilcox Silver Plate Company, Meriden, Conn. Covered dishes	June 11, 1878	380	113	13	1067
206, 997	Same. . . . . Pitcher	Aug. 13, 1878	360	110	14	254
207, 475	Babbitt, S. William, assignor to Wilcox Silver Plate Company, West Meriden, Conn. Waiter	Aug. 27, 1878	874	257	14	328
205, 464	Babcock, Aaron G., Lexington, Mass. Fly-trap	July 2, 1878	2	1	14	9
209, 599	Babcock, Alpheus, et al. (See Horton, Chace B., assignor.) (Reissue.)					
209, 212	Babcock, Charles A., Buffalo, N. Y. Combination implement	Nov. 5, 1878	66	19	14	689
199, 398	Babcock, Darius, assignor of one-half interest to Alanson S. Page, Oswego, N. Y. Machine for stretching and drying cloth	Oct. 22, 1878	848	245	14	618
	Babcock, Eli Henry, John Chester Whiting and Oliver Howard Chamberlain, Canandaigua, N. Y. Plow	Jan. 22, 1878	713	210	13	135
	Babcock, Henry C., et al. (See Cushman, Henry S., assignor.)					
	Babcock, James. (See Black & Babcock.)					
208, 359	Babcock, Nathan. (See Cottrell, Calvert B., assignor.)					
	Babcock, Nathan, Westerly, R. I. Griper motion for printing-machines	Sept. 24, 1878	853	248	14	469
	Babcock, Norman, et al. (See Horton, Chace B., assignor.) (Reissue.)					
210, 287	Babington, Thomas. (See Rose, Albert B., assignor.)					
	Bachelor, Henry A., West Waterville, Me. Sandpapering polishing-machine	Nov. 26, 1878	837	247	14	803
204, 521	Bacher, Peter. (See Demig & Bacher.)					
199, 489	Bachtel, Hiram J., McDonaldsville, O. Sausage-stuffer	June 4, 1878	94	32	13	1026
204, 416	Backer, Jacob, Rose Hill, Tex. Combined wrench and saw-set	Jan. 22, 1878	796	234	13	148
	Backus, Quimby S., Holyoke, Mass. Bit-stock	June 4, 1878	3	1	13	1013
207, 934	Bacon Arms Company. (See Sweet, Alonzo Louis, assignor.)					
	Bacon, Charles H., Boston, assignor of three-eighths interest each to Charles Brigham, Watertown, and C. C. Livermore, Cambridge, Mass. Inking apparatus for printing-machines	Sept. 10, 1878	379	115	14	400
205, 823	Bacon, Henry, Charleston, Me. Manufacture of artificial stone	July 9, 1878	405	114	14	64
203, 525	Bacon, Steuben T., Boston, Mass. Ballot-box	May 14, 1878	320	91	13	873
208, 281	Bacon, William S., Bloomville, Ohio. Millstone-driver	Sept. 24, 1878	773	226	14	459
202, 089	Badcock, Henry, Saint Petersburg, Pa. Pipe-tongs	Apr. 9, 1878	248	73	13	639
209, 600	Badger, George A., Quincy, Mass. Registering attachments for fire-arms	Nov. 5, 1878	67	19	14	689
205, 782	Badger, Orrin W. (See Bramer & Badger.) (Reissue.)					
	Badia, Joseph S., Philadelphia, Pa. Feed-water regulator	July 9, 1878	359	104	14	58
	Baechtel, Charles E., et al. (See Frank, Silas, assignor.)					



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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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203, 872	Baer, Franz. ( <i>See</i> Seng, Wendellin, assignor.)	May 21, 1878	688	190	13	926
207, 153	Bagley, Charles O., Oakland, Cal. Ore-washer	Aug. 20, 1878	528	158	14	279
	Bagley, Charles O., San Francisco, Cal. Mining-riffle					
	Bagley, Ralph, <i>et al.</i> ( <i>See</i> Westinghouse, George, jr., assignor.)					
203, 988	Bailey & Brothers, D. M. ( <i>See</i> Boals, James A., assignor.)	May 21, 1878	815	233	13	943
210, 899	Bailey, Charles A., Cobalt, Conn. Educational appliance	Dec. 17, 1878	583	101	14	916
208, 283	Bailey, Charles E., North Scituate, Mass. Mail-bag					
	Bailey, Charles F., and Charles Francis Perrenot, Rockport, Tex. Ironing and fluting machine	Sept. 24, 1878	775	226	14	450
202, 396	Bailey, Charles M., Baltimore, Md. Means for reversing propeller-blades	Apr. 16, 1878	581	171	13	689
208, 455	Bailey, Cyrus, assignor to Ferdinand Schumacher, Akron, Ohio. Oatmeal-machine	Oct. 1, 1878	1	1	14	489
200, 852	Bailey, Fortune L., assignor to Bailey Gun Company, Indianapolis, Ind. Machine-gun	Aug. 13, 1878	215	69	14	237
202, 690	Bailey, Galland O., Jesse A. Emmert, and August L. Capps, Minier, Ill. Nut-lock	Apr. 23, 1878	917	262	13	739
8, 024	Bailey, George C., Pittsburg, Pa. Stop-cock	Jan. 8, 1878	427	125	13	82
208, 282	Bailey, George H., Newark, N. J., assignor to William E. Hale, Chicago, Ill. Hydraulic elevator	Sept. 24, 1878	774	226	14	450
201, 903	Bailey, Gilbert L., Portland, Me. Implement for capping and uncapping cartridges	Apr. 2, 1878	45	12	13	605
	Bailey Gun Company. ( <i>See</i> Bailey, Fortune L., assignor.)					
209, 745	Bailey, Hamilton, Harrisburg, Pa. Dumping-wagon	Nov. 12, 1878	238	71	14	717
203, 576	Bailey, Henry C., Boston, Mass. Book-clamp	May 14, 1878	376	107	13	880
	Bailey, John. ( <i>See</i> Marshall, Ibbotson & Bailey.)					
202, 918	Bailey, Leonard, Hartford, Conn. Carpenter's plane	Apr. 30, 1878	1171	337	13	775
	Bailey, Luther S. ( <i>See</i> Standish & Bailey.)					
200, 122	Bailey, Michael B., assignor of one-half interest to Frank Bauer, Chicago, Ill. Composition roof	Feb. 12, 1878	242	73	13	279
207, 096	Bailey, Michael B., assignor, by means assignments, of one-half interest to Henry P. Taylor, Chicago, Ill. Paint	Aug. 20, 1878	476		14	273
	Bailey, Michel B. ( <i>See</i> Akerhielm, Hugo, assignor.)					
210, 077	Bailey, Milton S., Philadelphia, Pa. Grate	Nov. 19, 1878	601	179	14	768
201, 148	Bailey, Samuel R., Boston, Mass. Sleigh-standard	Mar. 12, 1878	334	102	13	472
209, 213	Bailey, William H., Providence, R. I. Temporary binder	Oct. 22, 1878	848	245	14	618
190, 490	Bain, William F. C., Edinburgh, North Britain. Fence-wire retainer	Jan. 22, 1878	797	234	13	148
207, 639	Baines, Edward, Toronto, Ontario, Canada. Reciprocating engine	Sept. 3, 1878	58	17	14	356
199, 011	Baines, John A., New York, N. Y. Rowlock	Jan. 8, 1878	302	89	13	63
200, 162	Bains, James, assignor of one-half interest to Joseph L. Cochran, Cincinnati, Ohio. Hydrant-valve	Feb. 12, 1878	282	84	13	284
208, 556	Baird, James B., Bayou La Chute, assignor of one-half interest to H. C. Stringfellow, Red River Parish, La. Stalk-cutter	Oct. 1, 1878	90	29	14	502
199, 139	Baird, John, New York, N. Y. Steam-boiler	Jan. 15, 1878	445	131	13	85
203, 875	Same..... Bearing for screw-propellers	May 21, 1878	691	197	13	927
203, 989	Same..... Steam-engine	May 21, 1878	816	234	13	943
207, 168	Baird, Samuel J., Richmond, Va., assignor to George Trull, New York, N. Y. Button-hole attachment for sewing-machines	Aug. 6, 1878	111	35, 36	14	220
207, 935	Baird, William F., Burlington, Iowa. Churn	Sept. 10, 1878	380	115	14	400
208, 783	Baird, William F., assignor of one-half interest to John J. Forney, Burlington, Iowa. Rotary churn	Oct. 8, 1878	348	100	14	542
202, 091	Baker, Aaron J., Edinburg, and John W. Simonton, Taylorsville, Ind. Device for detecting counterfeit coin	Apr. 23, 1878	918	262	13	739
204, 280	Baker, Allen S., Evansville, Wis. Pump	May 28, 1878	1142	327	13	988
	Baker, Barton Russell. ( <i>See</i> Carrier, Baker & McCarty.)					
202, 214	Baker, Burr C., Columbus, Ohio. Advertising medium	Apr. 9, 1878	377	111	13	656
	Baker, Caleb J. ( <i>See</i> Murray & Baker.)					
208, 140	Baker, Charles H., and Francis L. Bestor, Knoxville, Iowa. Wire-fence barb	Sept. 17, 1878	607	179	14	435
208, 948	Baker, Charles H., assignor of one-half interest to John B. Reynolds, San Francisco, Cal. Horse-power	Oct. 15, 1878	543	159	14	573
207, 793	Baker, Charles L. W., Cambridge, Mass. Manufacture of brushes	Sept. 10, 1878	225	71	14	381
206, 413	Baker, Charles Vurnen and Jacob Washington, Middlebourne, Ohio. Churn	July 30, 1878	1103	315	14	164
200, 016	Baker, Elbridge, Salem, Mass. Device for propelling wagons	Feb. 5, 1878	120	39	13	252
	Baker, Frederick A., Jr. ( <i>See</i> Lewis & Baker.)					
199, 250	Baker, George W., Saint Louis, Mo. Fruit-gatherer	Jan. 15, 1878	548	161	13	101
208, 881	Baker, Halsey H., Plainfield, N. J. Dummy	Oct. 15, 1878	468	135	14	563
	Baker, Henry M. ( <i>See</i> Hunter, George W., assignor.)					
	Baker, Henry M., <i>et al.</i> ( <i>See</i> Hunter, George W., assignor.)					
	Baker, Jacob Washington. ( <i>See</i> Baker, Charles Vurnen and Jacob Washington.)					
203, 813	Baker, James William, Decatur, Ill. Attachment to rubber overshoes	May 21, 1878	633	178	13	919
	Baker, John F., <i>et al.</i> ( <i>See</i> Kenworthy & McGregor, assignors.)					
206, 998	Baker, John G., Philadelphia, Pa. Steam-generator	Aug. 13, 1878	360	110	14	254
207, 936	Baker, John G., assignor to Enterprise Manufacturing Company, Philadelphia, Pa. Steam engine and pump	Sept. 10, 1878	381	115	14	400
210, 078	Baker, John G., Philadelphia, Pa., assignor to Enterprise Manufacturing Company. Slicing-machine	Nov. 19, 1878	602	179	14	768
	Baker, John J., <i>et al.</i> ( <i>See</i> Hoffman, Austin D., assignor.)					
	Baker, L. P. ( <i>See</i> Cliff, John W., assignor.)					
205, 338	Baker, Lewis I., and Lawrence O. Root, Minneapolis, Minn. Rail-joint	June 25, 1878	990	293	13	1155
8, 208	Baker, Loring J., Boston, Mass., assignor to J. Otis Wetherbee. Picture-rod molding	Apr. 30, 1878	1402	437	13	816
	Same..... ( <i>Reissue.</i> )	May 14, 1878	323	91	13	873
203, 526	Baker, Loring J., Boston, Mass. Picture-rod molding					
	Baker Manufacturing Company, S. W. ( <i>See</i> Baker, Seth W., assignor.)					
200, 965	Baker, Seth W., assignor to S. W. Baker Manufacturing Company, Providence, R. I. Tubular woven fabric	Mar. 5, 1878	140	46	13	437
	Baker, Thomas. ( <i>See</i> Scott & Baker.)					
207, 476	Baker, Thomas F., Cincinnati, Ohio. Grating	Aug. 27, 1878	874	258	14	328
206, 762	Baker, Walter, Ilion, N. Y. Manufacture of gun-bands	Aug. 6, 1878	105	24	14	220
206, 919	Same..... Manufacture of knife-scales	Aug. 13, 1878	287	87	14	245
208, 055	Baker, William C., assignor of part interest to William B. Duvall and Charles B. Culver, Baltimore, Md. Device for transmitting power	Sept. 17, 1878	519	155	14	423
209, 793	Baker, William C., New York, N. Y. Heating cars	Nov. 12, 1878	288	86	14	723
208, 557	Baker, William D., Alfordville, Ind. Wagon-seat spring	Oct. 1, 1878	100	30	14	502
8, 053	Baker, William H., Syracuse, N. Y. Breech-loading fire-arm	Jan. 22, 1878	944	274	13	171
199, 773	Same..... Lock for fire-arms	Jan. 29, 1878	1109	325	13	205
202, 397	Same..... Breech-loading fire-arm	Apr. 16, 1878	582	171	13	689
	Baker, William R. ( <i>See</i> McCormick & Baker.)					
201, 149	Baker, William R., Chicago, Ill., and Charles B. Withington, Janesville, Wis., assignors to C. E. & L. J. McCormick, Chicago, Ill. Grain-binder	Mar. 12, 1878	335	102	13	472

*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. E.	Vol.	Page.
210, 232	Baker, William R., assignor to C. H. & L. J. McCormick, Chicago, Ill. Mower .....	Nov. 26, 1878	776	231	14	796
203, 577	Baker, William S. G., Baltimore, Md. Car-axle and loose wheel .....	May 14, 1878	377	107	13	880
8, 029	Bulbach, Edward, jr., Newark, N. J. Retort for separating zinc from gold and silver alloys. (Reissue) ..	Jan. 8, 1878	433	127	13	83
207, 937	Balbach, Leopold, San Francisco, Cal. Refining base bullion .....	Sept. 10, 1878	383	.....	14	400
206, 212	Balch, Frederick A., Hingham, Wis. Floor-scrubber .....	July 23, 1878	853	243	14	129
210, 834	Balcom, Luke. (See Driscoll & Balcom.)					
	Baldermann, Johann, Finkenheerd, assignor to self and Paul Berndt, Fuerstenberg, Prussia. Lime and other kilns .....	Dec. 17, 1878	490	138	14	905
200, 852	Baldwin, Charles H., Tiffin, Ohio. Wash-board .....	Mar. 5, 1878	39	14	13	421
201, 980	Baldwin, Cyrus W., Brooklyn, N. Y. Hydraulic elevator .....	Apr. 2, 1878	116	34	13	616
202, 215	Same. Valve-gear for hydraulic elevators .....	Apr. 9, 1878	378	111	13	656
	Baldwin, Eben. (See Bate, William A., assignor.)					
209, 317	Baldwin, Eben A., North Andover, Mass., assignor to George L. Davis, John A. Wiley, Joseph M. Stone, George G. Davis, Joseph H. Stone, and James H. Davis. Spinning-mule .....	Oct. 29, 1878	956	279	14	637
209, 318	Same. Spinning yarn on spinning-mules .....	Oct. 29, 1878	958	280	14	637
204, 474	Baldwin, Edward, jr., New York, N. Y. Ash-sifter .....	June 4, 1878	56	18	13	1020
207, 477	Baldwin, Hannum, West Chester, Pa. Bill and paper file .....	Aug. 27, 1878	875	258	14	328
	Baldwin, John A. (See Woodruff, William P., assignor.)					
203, 697	Baldwin, John W., Fitchburg, Mass. Ash-sifter .....	May 14, 1878	497	141	13	895
204, 701	Baldwin, Joseph F., Chelsea, Mass. Mangle .....	June 11, 1878	284	88, 99	13	1056
206, 522	Baldwin, Ransom G., Oskaloosa, Iowa. Washing-machine .....	July 30, 1878	1218	350	14	178
199, 952	Baldwin, Silas D., Chicago, Ill. Coal-oil stove .....	Feb. 5, 1878	63	20	13	242
208, 949	Baldwin, Stephen W., New York, N. Y. Journal and bearings for rolling-mills .....	Oct. 15, 1878	545	160	14	573
210, 743	Baldwin, Stephen W., Yonkers, N. Y. Coupling for vehicles .....	Dec. 10, 1878	390	107	14	883
210, 080	Baldwin, William, Tioga, Pa. Padlock .....	Nov. 19, 1878	604	170	14	769
	Baldwin, William F. (See Norton, Edwin, assignor.)					
205, 232	Baldwin, William W., Cleveland, Ohio. Magazine-stove .....	June 25, 1878	874	{ 258 259 }	13	1140
204, 940	Bales, George Edward, Seattle, Wash. Trace and pad buckle .....	June 18, 1878	566	165	13	1094
8, 110	Ball, Albert, Worcester, Mass. Magazine fire-arm .....	Feb. 26, 1878	981	280	13	406
205, 943	Ball, Charles E., Philadelphia, Pa. Hydrocarbon-lamp .....	July 16, 1878	545	155	14	87
206, 999	Same. Carbureting-lamp .....	Aug. 13, 1878	362	111	14	254
207, 705	Ball, Edward Moses, assignor of one-half interest to Daniel F. Gallaher and William O. Neil, Stanstead, Quebec, Canada. Fire-escape .....	Sept. 3, 1878	122	38	14	365
8, 077	Ball, Frank H., Foxburg, Pa. Valve-gear .....	Feb. 12, 1878	496	146	13	317
200, 242	Same. Balanced slide-valve .....	Feb. 12, 1878	355	106	13	296
202, 507	Ball, George S., assignor of one-half interest to Edward J. Zahn, Lancaster, Pa. Device for holding coin and making change .....	Apr. 16, 1878	685	201	13	704
199, 774	Ball, Harvey, Nashua, N. H. Weaving-needle .....	Jan. 29, 1878	1110	326	13	265
210, 079	Ball, R. Edward, Jamaica, N. Y. Artificial leather composition .....	Nov. 19, 1878	903	.....	14	769
210, 655	Same. Making artificial leather, &c. .....	Dec. 10, 1878	300	.....	14	871
	Ball, Robert R. (See Peck & Ball.)					
210, 395	Ball, Wilber W., Bangor, Mich. Head-rest for coffins .....	Dec. 3, 1878	6	1	14	825
199, 012	Ballagh, Andrew H., Macon City, Mo. Harrow .....	Jan. 8, 1878	303	89	13	63
209, 444	Ballard, Alvan S., Waterville, N. Y. Fire-arm .....	Oct. 29, 1878	1089	317	14	656
	Ballard, George M., et al. (See Jenkinson, George B., assignor) .....					
	Same. (See Schwerin, Morris, assignor) .....					
207, 094	Ballard, Hattie W. (See Ballard, Martin L., assignor.)					
201, 381	Ballard, John, Cohoes, N. Y. Car-coupling .....	Aug. 13, 1878	454	138	14	265
	Ballard, Martin L., assignor to Hattie W. Ballard, Canton, Ohio. Carriage-spring coupling .....					
208, 141	Ballev, Thomas Winfield, and Charles A. Fuller, Princeton, Mo. Harvester guard-finger .....	Mar. 19, 1878	592	182	13	516
209, 375	Ballicett, Charles Oliver, Waterloo, Iowa. Reversible center-pinion for watches .....	Sept. 17, 1878	607	180	14	435
199, 175	Balling, Charles, White Mills, Pa. Machine for cutting down from feathers .....	Oct. 29, 1878	1021	297	14	646
204, 785	Ballou, Cyrus C., Albany, N. Y. Manufacture of boots and shoes .....	Jan. 15, 1878	479	142	13	91
204, 786	Same. same .....	June 11, 1878	381	113	13	1067
	Ballou, H. M. (See Tripp & Ballou.)					
199, 492	Baltimore, John, New York (Harlem), N. Y. Combined gas scrubber and washer .....	Jan. 22, 1878	790	235	13	149
199, 491	Baltzy, Benjamin F., Montreal, Quebec, Canada. Photographic-plate holder .....	Jan. 22, 1878	798	234	13	149
	Balus, Hamilton, et al. (See Pate, Theodore H., assignor.)					
208, 360	Bamber, Joseph J., San Francisco, Cal. Deep-water safety-bath .....	Sept. 24, 1878	854	249	14	409
207, 383	Bamberger, Henry, Philadelphia, Pa. Machine for cleaning and polishing coffee .....	Aug. 27, 1878	777	231	14	316
205, 033	Bamhill, Thomas W., Providence, Ky. Spittoon .....	June 18, 1878	654	193	13	1106
210, 206	Bamrick, James, Syracuse, N. Y. Grate-bearing bar .....	Dec. 3, 1878	7	2	14	825
205, 032	Bancroft, George D., Lynn, assignor to George F. Williams, Dedham, Mass. Thermo and electric gas controlling and lighting apparatus .....	June 18, 1878	653	193	13	1106
	Bancroft, J. Sellers. (See Sellers & Bancroft.)					
	Bancroft, James. (See Veronol, Cornelius B., assignor.)					
8, 175	Bancroft, Joseph W., and Thomas Walker, Philadelphia, Pa., assignors of part interest to S. H. Safford. Amalgamator .....	Apr. 16, 1878	830	240	13	720
205, 605	Bancroft, Reuben F., Camden, N. J., and John I. Ashmore, Philadelphia, Pa. Hatch-way-door mechanism .....	July 2, 1878	145	44	14	28
202, 398	Banfield, Julia D., Boston, Mass. Bosom-form .....	Apr. 16, 1878	582	171	13	639
203, 400	Same. Corset-busk .....	May 7, 1878	171	49	13	844
201, 217	Banger, George S., Williamsport, Pa., and Lorenzo D. Hurd, Wellsville, N. Y., assignors to selves and James Devlin, Williamsport, Pa. Car-truck .....	Mar. 12, 1878	390	{ 122 123 }	13	483
	Bangs, Amelia F. (See Bangs, Edward Dwight, assignor.)					
203, 873	Bangs, Edward Dwight, assignor to Amelia F. Bangs, Galesburg, Ill. Condensing-vessel .....	May 21, 1878	689	196	13	927
204, 788	Banister, George, Columbus, Ohio. Process for tempering steel .....	June 11, 1878	385	.....	13	1067
204, 281	Banks, Dunstan E., and Thomas M. Merck, Gainesville, Ga. Hernial truss .....	May 28, 1878	1144	327	13	988
	Banks, George L. (See Banks, William C. and George L.)					
210, 081	Banks, John C., Carlisle, Ky. Filter .....	Nov. 19, 1878	604	180	14	769
202, 339	Banks, William C. and George L., Gomer's Mills, Colo. Calf-weaner .....	Apr. 16, 1878	583	171	13	689
	Bannen, Peter L. (See Burns, James, assignor.)					
203, 698	Banner, George Edward, Newark, N. J., assignor of one-half interest to Anna Gray Fales, Hartford, Conn. Steam-engine boiler .....	May 14, 1878	498	141	13	895
203, 699	Same. Governor .....	May 14, 1878	499	141	13	896
204, 282	Same. Steam-engine cylinder .....	May 28, 1878	1145	327	13	988
204, 283	Same. Steam-engine standard and cylinder .....	May 28, 1878	1146	328	13	988
204, 787	Bansen, Wilhelm, Bodenbach-on-the-Elbe, Austria. Manufacture of wire .....	June 11, 1878	383	114	13	1067
	Baradel, John. (See Rolland & Baradel.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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209, 105	Baragwanath, William, Chicago, Ill. Feed-water heater.....	Oct. 22, 1878	732	212	14	603
210, 288	Barbarin, Arthur, New Orleans, La. Bale-tie.....	Nov. 26, 1878	838	247	14	803
	Barbe, William. (See Brisac & Barbe.)					
199, 775	Barber, Abrem H., Red Oak, Iowa. Animal-trap.....	Jan. 29, 1878	1111	326	13	205
	Barber, Charles E. (See Ferguson, Elisha, assignor.)					
	Barber, David D., et al. (See Buic, Duncan M., assignor.)					
	Same. (See Wells, Isaac, assignor.)					
202, 090	Barber, Edward, Jonesborough, Ga. Plow.....	Apr. 9, 1878	248	73	13	639
	Barber, F. J. (See Smith, Walton Duane, assignor.)					
206, 698	Barber, Henry Ansel and Thomas, Watertown, N. Y. Rotary pump.....	Aug. 6, 1878	43	13	14	212
203, 990	Barber, Henry R., Lambertville, N. J. Rubber belting.....	May 21, 1878	818	235	13	943
199, 140	Barber, Oliver P., Saginaw, Mich., assignor of two-thirds interest to Charles H. Pat- terson, Chicago, Ill., and Joshua Tuthill, Saginaw, Mich. Inhaler.....	Jan. 15, 1878	446	132	13	85
	Barber, Thomas. (See Barber, Henry Ansel and Thomas.)					
	Barbour, George H. (See Dwyer & Barbour.) (Reissue.)					
200, 684	Barbour, Matthew, Hamilton, Ohio. Sweeper for seeding-machines.....	Feb. 26, 1878	836	246	13	385
	Barbour, Thomas, et al. (See Wallace, Joseph, assignor.)					
203, 102	Barcellos, Daniel, Williamsburg, N. Y. Thread-controller for sewing-machines.....	Apr. 30, 1878	1343	{ 300 391 }	13	798
204, 789	Barclay, Henry, Elizabeth, N. J. Clamp for sewing-machine needles.....	June 11, 1878	385	114	13	1067
208, 704	Barclay, William Paris, Virginia City, Nev. Hydraulic and wire-rope pumping system.....	Oct. 8, 1878	266	76	14	532
207, 839	Bard, David, assignor of one-half interest to George Flagg, Cincinnati, Ohio. Broom- press.....	Sept. 10, 1878	272	84	14	387
	Bard, William. (See Plumb, Sherman L., assignor.)					
	Bardell, Alfred. (See Edgar & Bardell.)					
203, 991	Bardell, Alfred, Brooklyn, N. Y. Fire-shovel.....	May 21, 1878	819	235	13	943
	Bardsley, John C. (See Clarke, Roselle, assignor.)					
	Bardwell, Horatio G. (See Densmore, Emmett, assignor.)					
202, 777	Barkalow, William C., New London, Ind. Portable stove-back.....	Apr. 23, 1878	1004	289	13	750
	Barker, Adam. (See Hyde & Barker.)					
201, 482	Barker, Arnold, Bloomfield, Iowa. Weight-motor.....	Mar. 19, 1878	690	211	13	530
200, 422	Barker, Asbury, Peekskill, N. Y. Hinge for molders' flasks.....	Feb. 19, 1878	553	163	13	334
202, 216	Barker, Benjamin F., Curtisville, Mass. Machine for making paper-pulp from wood..	Apr. 9, 1878	380	111	13	657
	Barker, James, et al. (See Cziner, Matjas, assignor.)					
8, 528	Barker, Joseph, Chicago, Ill., assignor, by mesne assignments, to Lysander Hill, A. L. and Thomas H. Brown. Middlings-separator..... (Reissue.)	Dec. 17, 1878	803	220	14	942
200, 423	Barker, Silas, Hartford, Conn. Nutmeg-grater.....	Feb. 19, 1878	534	163	13	334
203, 313	Barker, Volney, Bridgeton, Me. Machine for filling cans.....	May 7, 1878	84	25	13	831
207, 000	Barker, Wesley E., Utica, Ky. Quilting-frame.....	Aug. 13, 1878	363	111	14	254
210, 082	Barker, William F., Lemars, Iowa. Heating-drum.....	Nov. 19, 1878	605	180	14	769
	Barkham, Edmund. (See Scharnweber & Barkham.)					
205, 520	Barley, James Hanley and Thomas Kincaid, Sedalia, Mo. Harrow-tooth fastening....	July 2, 1878	59	17	14	16
	Barley, Thomas Kincaid. (See Barley, James Hanley and Thomas Kincaid.)					
203, 877	Barlow, Charles, Cookshire, assignor to self, Thomas B. Terrill, and Charles N. Taylor, Quebec, Canada. Wash-bench.....	May 21, 1878	694	198	13	927
199, 176	Barlow, Frederick A., Ladora, Iowa. Wagon-brake.....	Jan. 15, 1878	481	142	13	91
204, 941	Barlow, Joseph C., Quincy, Ill. Seed-planter.....	June 18, 1878	567	166	13	1094
198, 833	Barnmore, Edwin C., New Buffalo, Mich. Bed-spring.....	Jan. 1, 1878	110	32	13	26
207, 236	Barnard, Heman A., Moline, Ill. Grain-separator.....	Aug. 20, 1878	612	184	14	290
	Barnard & Leas Manufacturing Company. (See Esselstyn, William N., assignor.)					
208, 558	Barnard, Charles Gustavus, Findley, Ohio. Feather-renovator.....	Oct. 1, 1878	100	30	14	503
203, 992	Barnes, Alonzo C., jr., assignor of one-half interest to Alonzo C. Barnes, Philadelphia, Pa. Stencil-plate.....	May 21, 1878	820	235	13	943
200, 598	Barnes, Harvey S., and John I. Miller, West Point, Wis. Spoke-tenoning and felly- boring machine.....	Feb. 26, 1878	744	218	13	371
202, 400	Barnes, Henry, Orange, Mass. Friction-clutch.....	Apr. 16, 1878	584	172	13	669
203, 876	Barnes, James, Accrington, England. Piston water-meter.....	May 21, 1878	693	198	13	927
	Barnes, John. (See Barnes, William F. and John.)					
208, 950	Barnes, John, Rockford, Ill. Harvester-rake.....	Oct. 15, 1878	546	160	14	573
207, 001	Barnes, John L., Warsaw, Ind. Cider-mill.....	Aug. 13, 1878	364	111	14	255
199, 014	Barnes, Lovick P., and John H. Faupel, Saint Louis, Mo. Car-roof.....	Jan. 8, 1878	304	89	13	63
203, 339	Barnes, Nathan Marcus, La Fayette, Ind. Bee-hive.....	June 25, 1878	990	{ 293 294 }	13	1155
207, 154	Barnes, Stephen, New Haven, Conn. Railway-gate.....	Aug. 20, 1878	527	158	14	279
203, 874	Barnes, Thomas, Harwich Township, Kent County, Ontario, assignor to Robert Shoff, London, Canada. Grain-separator.....	May 21, 1878	690	{ 196 197 }	13	927
206, 763	Barnes, Walter G., Freeport, Ill. Riding-cultivator.....	Aug. 6, 1878	107	34	14	220
203, 578	Barnes, William F. and John, Rockford, Ill. Rotary cutter.....	May 14, 1878	378	167	13	880
207, 640	Same. Scroll-sawing machine.....	Sept. 3, 1878	59	17, 18	14	355
201, 086	Barnes, William H., Chicago, Ill. Cooking-range.....	Mar. 12, 1878	269	84	13	463
208, 951	Barnes, Willis Lambert, Charlestown, Ind. Ballot-box.....	Oct. 15, 1878	549	{ 160 161 }	14	573
	Barnett, George, et al. (See Weed, Alfred, assignor.)					
	Barnett, Henry, et al. (See Weed, Alfred, assignor.)					
206, 070	Barnett, John W., and Thomas J. Hobbs, Fountain Creek, Tenn. Side-hill plow.....	July 16, 1878	673	194	14	103
	Barnett, Robert W. (See Spalding, Orlando D., assignor.)					
206, 214	Barnett, Samuel M., New York, N. Y. Exercising-machine.....	July 23, 1878	855	244	14	129
200, 424	Barney, Everett H., Springfield, Mass. Skate.....	Feb. 19, 1878	555	164	13	334
206, 524	Same. Same.....	July 30, 1878	1220	351	14	179
	Barnhart, Alson E., et al. (See Fuchs, Henry, assignor.)					
	Barnhart, Arthur M., et al. (See Fuchs, Henry, assignor.)					
	Barnhart, George W., et al. (See Fuchs, Henry, assignor.)					
	Barnhart, Levi, et al. (See Forlow, Jacob, assignor.)					
	Barnhart, Martin. (See Masterman, George, assignor.)					
	Barnstorf, Julius. (See Schulze-Berge & Barnstorf.)					
199, 399	Barnum, Ashbell, Green Island, assignor of one-half interest to Gilbert Geer, jr., Troy, N. Y. Ventilating-cap for chimneys, &c.....	Jan. 22, 1878	713	210	13	135
	Barnum, Daniel. (See Bullock, Smith W., assignor.)					
8, 236	Barnum, Isaac W. (See Fuller, Henry W., assignor.) (Reissue.)					
	Barnum, Isaac W., Brooklyn, N. Y., assignor, by mesne assignments, to Israel M. Rose. Tuck-creasing attachment for sewing-machines..... (Reissue.)	May 21, 1878	956	274	13	960
	Baron, Alfred L. (See Cash & Baron.) (Reissue.)					
	Same. (See Cash & Baron.)					
	Baron, Alfred L., et al. (See Cash, Evan F., assignor.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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202, 779	Baron, Alfred L., Evan F. Cash, and David Rankin, Bellaire, Ohio. Lantern	Apr. 23, 1878	1005	289	13	750
208, 142	Baron, Alfred L., assignor to self, Evan F. Cash, and David Rankin, Bellaire, Ohio. Lantern	Sept. 17, 1878	608	180	14	435
199, 251	Baron, Charles S. S., and Charles H. Tallman, Bellaire, Ohio. Oil-can	Jan. 15, 1878	549	162	13	102
199, 252	Same	Jan. 15, 1878	550	162	13	102
202, 778	Baron, Gustavus A., Gouverneur, N. Y. Cream-pump	Apr. 23, 1878	1004	289	13	750
199, 893	Baron, Joseph, Dayton, Ohio. Straw-cutter	Feb. 5, 1878	3	1	13	233
209, 319	Baronidis, George M., San Francisco, Cal. Hot atmosphere and medicated bath	Oct. 29, 1878	959	260	14	637
207, 338	Barr, Benjamin F., Shady Grove, Pa. Manure-fork	Aug. 27, 1878	730	219	14	311
202, 794	Barr, Jacob N., Altoona, Pa. Chiff for car-wheels	Sept. 10, 1878	226	71	14	381
202, 780	Barr, John Henry, Redmon, Ill. Harrow	Apr. 23, 1878	1008	289	13	751
210, 397	Barr, Samuel. (See Heaton, Lewis E., assignor.)					
205, 824	Barre, Léon, New York, N. Y. Sleeve-button	Dec. 3, 1878	7	2	14	825
207, 938	Barrett, Edward H., Minneapolis, Minn. Compound for artificial stone	July 9, 1878	406		14	64
	Barrett, James, Boston, Mass. Water-trap for sinks, &c.	Sept. 10, 1878	384	116	14	400
	Barrett, John P., et al. (See Lambert, Aloysius A., assignor.)					
	Barrett, Richard. (See Codd, Hiram, assignor.) (Reissue.)					
204, 124	Barrett, William W., Wayne, and Albert Smith, Barrington, N. Y. Churn	May 28, 1878	981	279	13	967
209, 214	Barringer, Peter, Fayetteville, Ark. Spoke-trimmer	Oct. 22, 1878	849	245	14	618
204, 650	Barritt, Newby S., Saugerties, N. Y. Method of inserting bolt in boiler-plate	June 11, 1878	234	73	13	1049
207, 002	Barron, Ernest R., Ilion, assignor to Type-Writer Company, New York, N. Y. Type-writing machine	Aug. 13, 1878	365	112	14	255
208, 506	Barron, Horton, Eau Claire, Wis. Crosscut-saw handle	Oct. 1, 1878	50	16	14	496
199, 494	Barron, James Henry. (See Jordan & Barron.)					
207, 939	Barron, Walter J., New York, assignor to Type-Writer Company. Type-writing machine	Jan. 22, 1878	802	235	13	149
	Barrow, Benjamin Franklin, Jewett, Tex. Tree for riding-saddles	Sept. 10, 1878	385	116	14	400
	Barrow, David. (See Barrow, Samuel, David, Jacob, and Linzy Seth.)					
	Barrow, Jacob. (See Barrow, Samuel, David, Jacob, and Linzy Seth.)					
	Barrow, Linzy Seth. (See Barrow, Samuel, David, Jacob, and Linzy Seth.)					
199, 177	Barrow, Samuel, David, Jacob, and Linzy Seth, Windfall, Ind. Lifting-jack	Jan. 15, 1878	482	142	13	91
204, 125	Barrows, Charles H., Willimantic, Conn. Mustache-guard	May 28, 1878	982	279	13	967
199, 013	Barrows, Ebeneser, Brooklyn, N. Y. Platform-door for stove-ovens	Jan. 8, 1878	304	89	13	63
199, 493	Barrows, Francis A., Castleton, Vt. Plow	Jan. 22, 1878	801	235	13	149
199, 253	Barrows, Henry M., New York, N. Y., and William Kennish, New Brunswick, N. J., assignors to said Barrows. Ruler	Jan. 15, 1878	551	162	13	102
204, 523	Barrows, Reuben C. (See Pirz, Anthony, assignor.)					
	Barrows, William E., Hartford, Conn., assignor to H. N. Daggett, Attleborough, Mass. Stay and clasp for narrow fabrics	June 4, 1878	96	32	13	1026
	Barry, David. (See Baxendale & Barry.)					
201, 731	Barry, James, assignor to self and Joseph Barry, Auburn, N. Y. Lubricator	Mar. 26, 1878	957	293	13	572
	Barry, Joseph. (See Barry, James, assignor.)					
200, 163	Barsalou, Henry, Saint Anne, Ill. Seeding-machine	Feb. 12, 1878	283	84	13	285
200, 017	Barstow, Vinal B. (See Bradbury & Barsfow, assignors.)					
205, 825	Bartel, Rudolph Frederic, New York, N. Y. Thermostat for electric fire-alarms	Feb. 5, 1878	121	40	13	252
207, 235	Bartell, Charles F., et al. (See Roberts, Edward J., assignor.)					
202, 136	Barth, Henry, Cincinnati, Ohio. Double-window sash	July 9, 1878	407	116	14	64
202, 137	Barth, John, jr., Evansville, Ill. Insecticide	Aug. 20, 1878	612		14	290
202, 138	Barthel, Albrecht E., Detroit, Mich. Combined gun-tool and whistle	Apr. 9, 1878	297	87	13	645
202, 138	Same. Bottle-stopper fastener	Apr. 9, 1878	297	88	13	645
206, 525	Same. Bottle-stopper	Apr. 9, 1878	298	88	13	645
201, 982	Same. Bottle-stopper fastener	July 30, 1878	1221	351	14	179
202, 401	Bartholomae, George, Chicago, Ill. Fermenting beer	Apr. 2, 1878	119	35	13	616
	Same. Wet-grain elevator	Apr. 16, 1878	587	172	13	690
8, 115	Bartholomew, George W. (See Bartholomew, Harry S., assignor.) (Reissue.)					
210, 398	Bartholomew, Harry S., Bristol, Conn., assignor to self and George W. Bartholomew. Bit-stock	Mar. 12, 1878	517	158	13	497
	Bartholomew, Henry A., Brooklyn, N. Y. Horseshoe-calk	Dec. 3, 1878	8	2	14	825
206, 523	Bartine, John W. (See Bartine, Stephen B., assignor.)					
20, 732	Bartine, Stephen B., Tottenville, assignor of one-half interest to John W. Bartine, New York, N. Y. Boot-jack	July 30, 1878	1219	351	14	179
	Bartle, Warren S., Newark, N. Y. Feed-cutter	Mar. 26, 1878	958	293	13	572
	Bartlett, Addison W., et al. (See Franklin, Henry L., assignor.)					
	Bartlett, D. L., et al. (See McAvoy, Hugh L., assignor.)					
	Bartlett, Eayre O. (See Lewis & Bartlett.)					
210, 835	Bartlett, Frederic C., New York, N. Y. Galvanic battery	Dec. 17, 1878	492	{ 138 139 }	14	905
200, 498	Bartlett, Frederick W., and Charles Ward, Buffalo, N. Y. Wash for covering brick surfaces	Feb. 19, 1878	625		13	345
205, 340	Bartlett, George F. H., Buffalo, N. Y. Ozone-generator	June 25, 1878	992	294	13	1155
206, 213	Bartlett, George, Sananogue, Ontario, Canada. Vehicle-wheel hub	July 23, 1878	854	244	14	129
210, 056	Bartlett, James H., Woodland, assignor of one-half interest to John Bateman, Oakville, Cal. Spark-extinguisher	Dec. 10, 1878	301	82	14	871
207, 097	Bartlett, Joseph W. (See Sanford, Frank V., assignor.)					
198, 834	Bartlett, Richard H., Schenectady, N. Y. Wire bale-tie	Aug. 20, 1878	477	143	14	273
210, 900	Bartlett, Samuel R., Detroit, Mich. Press	Jan. 1, 1878	111	32	13	26
208, 284	Bartley, Robert J., Cleveland, Ohio. Calk attachment for horseshoes	Dec. 17, 1878	584	161	14	916
204, 942	Barton, Clark Talbot, Tusculum, Ala. Cultivator	Sept. 24, 1878	777	227	14	459
201, 981	Barton, John W., Emporia, Kans. Combined water-reservoir and stove-pipe shelf	June 18, 1878	569	166	13	1094
206, 764	Barton, Joseph K., Worcester, Mass. Toy wheeled vehicles	Apr. 2, 1878	118	34	13	616
8, 253	Barton, Richard T., New Haven, Conn. Holdback for carriages	Aug. 6, 1878	108	34	14	220
209, 015	Bartram, Aaron A., Redding, assignor to James Ives, Mount Carmel, Conn. Carriage-pole	May 28, 1878	1285	366	13	1006
208, 559	Bartram, Walker B., Norwalk, Conn. Wagon-jack	Oct. 15, 1878	619	179	14	582
205, 169	Bartram, Walter E., and Henry C. Powell, London, England. Rotary engine, &c	Oct. 1, 1878	102	31	14	503
207, 088	Barwick, William Henry, Hyde Park, Mass. Combined ice-tool	June 25, 1878	807	240	13	1131
207, 339	Barwick, William H., Hyde Park, Mass. Nail and spike extractor	Aug. 20, 1878	477	143	14	273
	Barwick, William Henry, Hyde Park, Mass. Scissors-sharpener	Aug. 27, 1878	731	219	14	311
	Bash, Henry. (See Mackay, Murdoch, assignor.)					
201, 484	Bash, Henry R., assignor of two-thirds interest to M. T. Lowry and H. V. P. Draper, Hannibal, Mo. Flue	Mar. 19, 1878	691	212	13	530
207, 155	Baskin, William C. (See Tyler & Baskin.)					
	Bassett, Charles H., Derby, Conn. Coping and covering for graves	Aug. 20, 1878	258	159	14	279
	Bassett, D. M. (See Hes, Henry James, assignor.)					

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. &	Vol.	Page.
201, 483	Bassett, Herman W., Wallingford, Conn. Device for receiving and arranging blanks.	Mar. 19, 1878	691	211	13	530
205, 992	Bassett, John Mott, Athens, Ga. Plow.	July 16, 1878	597	172	14	93
207, 840	Bassett, Marshall L., West Haven, assignor to Myron H. Kinsley, Wallingford, Conn. Attachment to metal-blank forming machine.	Sept. 10, 1878	273	84	14	387
	Bassett, R. N. (See De Forest & Gilbert, assignors) (Reissue.)					
205, 170	Bassett, Richard A., assignor to self and Robert J. Randolph, Rockford, Ill. Milk and provision rack.	June 25, 1878	807	240	13	1131
	Bassett, W. L., et al. (See Bergstrom, Andrew, assignor) (Reissue.)					
209, 215	Bastet, Louis, Brooklyn, N. Y. Insulating railway-track.	Oct. 22, 1878	849	245	14	618
208, 705	Bastwell, Columbus, Etna, Me. Harrow.	May 14, 1878	504	143	13	806
8, 196	Batchelder, Asahel G., assignor, by mesne assignments, to John H. Haworth and W. S. Watson, Lowell, Mass. Machine and process for making paper tubes.	Apr. 23, 1878	1162	334	13	760
209, 746	Batchelder, Asahel G., Lowell, Mass. Paper-tube machine.	Nov. 12, 1878	239	71	14	717
8, 340	Batchelder, Hazen J., Montpelier, Vt., assignor, by mesne assignments, to self and Theodore S. Very, Machine for making horseshoes.	July 16, 1878	787	225	14	116
200, 425	Batchelder, Hazen J., Fitchburg, assignor to H. K. Flagler and T. I. Very, Boston, Mass. Manufacture of horseshoes.	Feb. 19, 1878	556	164	13	334
201, 485	Batchelder, William W., New York, N. Y. Lighting device.	Mar. 19, 1878	692	212	13	530
204, 284	Same. Scintillator for lighting tinder-cord.	May 28, 1878	1147	328	13	988
204, 285	Same. Scintillator for lighting gas.	May 28, 1878	1148	328	13	988
204, 286	Same. Scintillating attachment for gas-burners.	May 28, 1878	1150	329	13	989
203, 236	Bate, John J., Brooklyn, assignor to Bate Refrigerating Company, New York, N. Y. Refrigerating-car.	May 7, 1878	1	1	13	821
	Bate Refrigerating Company. (See Bate, John J., assignor.)					
202, 217	Bato, William A., assignor to Eben Baldwin, Yonkers, N. Y. Hat.	Apr. 9, 1878	383	112	13	657
207, 940	Bate, William T., Conshohocken, Pa. Steam-generator.	Sept. 10, 1878	386	116	14	400
	Bateman, John. (See Bartlett, James H., assignor.)					
204, 524	Bates, Asa N., Dallas County, Tex. Machine for oiling slides and guides.	June 4, 1878	97	32	13	1026
207, 841	Bates, Benjamin, Baltimore, Md. Vitriol-holder for beverage-carbonizing apparatus.	Sept. 10, 1878	274	85	14	367
200, 018	Bates, Charles E., West Cheshire, Conn. Button-fastening.	Feb. 5, 1878	122	40	13	252
207, 706	Same. Button.	Sept. 3, 1878	123	38	14	365
209, 320	Same. same.	Oct. 29, 1878	961	280	14	637
205, 465	Bates, David, Fort Branch, Ind. Stump-burner.	July 2, 1878	3	1	14	9
202, 979	Bates, Edward P., assignor to Edward W. Parmelee, Syracuse, N. Y. Apparatus for preserving food.	Apr. 30, 1878	1229	355	13	783
8, 464	Bates, Emory H., Washington, D. C., assignor of one-half interest to Theodore Van Skelline. Bracket.	Oct. 22, 1878	950	277	14	632
206, 071	Bates, Francis G., Springfield, Mass. Clutch.	July 16, 1878	674	195	14	103
206, 072	Same. same.	July 16, 1878	675	195	14	103
206, 073	Bates, Francis G., Springfield, and Louis E. Hartmann, Greenfield, Mass. Mechanisms for operating doffer-combs.	July 16, 1878	676	195	14	103
	Bates, Frank G. (See Burwell & Bates) (Reissue.)					
200, 685	Bates, Stephen, Providence, R. I. Paper collar.	Feb. 26, 1878	837	246	13	385
	Bates, Thomas L. (See Wital, George L., assignor.)					
202, 402	Bates, William Alexander, Boston, Mass. Setting for gems.	Apr. 16, 1878	588	173	13	690
199, 682	Bates, William S., Cincinnati, Ohio. Speed-indicator.	Jan. 29, 1878	1027	299	13	192
202, 506	Batt, Jacob, Wilkesbarre, Pa. Vehicle-spring.	Apr. 16, 1878	684	201	13	704
203, 579	Battley, David C., Marion Centre, Kans. Carbureter.	May 14, 1878	380	107	13	880
203, 401	Battle, Curran, Warrenton, Ga. Bale-tie.	May 7, 1878	172	50	13	844
202, 218	Batty, Joseph W., assignor of two-thirds interest to G. H. Davison, Baltimore, Md. Lubricating bearing for millstones.	Apr. 9, 1878	383	112	13	657
	Bauer, Frank. (See Bailey, Michael B., assignor.)					
	Bauer, Paul. (See Watson & Bauer.)					
200, 445	Baugh, Daniel, et al. (See Baugh, Edwin P., assignor.) Baugh, Edwin P., assignor to self, John P., and Daniel Baugh, Philadelphia, Pa. Treatment of offal for fertilizers.	Oct. 29, 1878	1090	317	14	656
203, 103	Baugh, John P., et al. (See Baugh, Edwin P., assignor.)					
210, 233	Baughn, Robert F., and William M. Harrison, Lexington, Miss. Lint-room.	Apr. 30, 1878	1344	391	13	798
	Baum, Heinrich, assignor to Meister, Lucius & Brünig, Höchst-on-the-Main, Germany. Coloring-matter to be used as dye.	Nov. 26, 1878	781		14	796
206, 699	Baum, Jacob Monroe, assignor to self and Harry U. Kistner, Selin's Grove, Pa. Tobacco-pipe.	Aug. 6, 1878	44	14	14	212
200, 641	Baumgartner, Christian, Rock Island, Ill. Wagon-gearing and tongue-support.	Feb. 26, 1878	788	231	13	378
199, 015	Bausch, John J., et al. (See Gundlach, Ernst, assignor.) Bausch, John J., assignor to Bausch & Lomb Optical Company, Rochester, and Orange Judd Company, New York, N. Y. Microscope.	Jan. 8, 1878	306	90	13	63
	Bausch & Lomb Optical Company et al. (See Bausch, John J., assignor.)					
206, 920	Baville, Edmond Pierre, Paris, France. Screw-cutting stock and tool.	Aug. 13, 1878	288	87	14	245
201, 486	Baxendale, William J., and David Barry, Rochester, N. Y. Machine for reducing wood to pulp for paper.	Mar. 19, 1878	695	212	13	530
208, 784	Baxter, Charles M., Lebanon, N. H. Hot-air furnace.	Oct. 8, 1878	349	100	14	543
	Baxter, John. (See Taylor, James P., assignor.)					
206, 294	Baxter, Myron L., Aurora, Ill., assignor to self and Joseph J. Walton, New York, N. Y. Broom.	July 23, 1878	946	268	14	141
207, 237	Baxter, William, assignor of one-half interest to A. Van Winkle, Newark, N. J. Portable steam-engine.	Aug. 20, 1878	614	184	14	290
204, 702	Baxter, William W., Heraman, Ill. Waterproofing composition.	June 11, 1878	287		13	1056
204, 184	Bayles, Alfred G., and Charles A. Hunter, New York, N. Y. Globe-holder.	May 28, 1878	1052	298	13	976
	Bayley, Samuel H. (See Stead & Bayley.)					
199, 953	Bayley, Oliver W., Dayton, Ohio. Steam-pressure gage.	Feb. 5, 1878	64	21	13	243
8, 147	Baylies, Franklin. (See Ford, Slado & Baylies.)					
201, 733	Bayliss, Edwin, Massillon, Ohio. Wheel-harrow.	Apr. 2, 1878	228	66, 67	13	632
205, 826	Bayliss, Henry, Providence, R. I. Implement for capping and uncapping cartridges.	Mar. 26, 1878	960	293	13	572
208, 705	Bayrd, Charles L., Wakefield, and Simon Paul, Waltham, Mass. Music-leaf turner.	July 9, 1878	407	116	14	64
	Bazemore, Merreda S., Spring Garden, Ala. Rotary churn.	Oct. 8, 1878	267	76	14	532
	Bazin, J. A. (See Wheeler & Bazin) (Reissue.)					
199, 016	Bazzoni, Lewis James, Newburg, N. Y. Vehicle-spring.	Jan. 8, 1878	306	90	13	63
199, 610	Beach, Allen J., Linden, Mich., Running-gear for wagons.	Jan. 29, 1878	952	277	13	181
	Beach, Arad S. (See Grover & Beach.)					
	Beach, Edgar B. (See Beach, Henry B. and Edgar B.)					
199, 400	Beach, Edgar B., West Meriden, Conn. Pulley-block.	Jan. 22, 1878	714	210	13	135
210, 744	Beach, Flavel A., assignor of one-half interest to George H. Van Pelt, Chicago, Ill. Last.	Dec. 10, 1878	392	107	14	883
8, 444	Beach, George H. (See Colborne, Levi H., assignor.) Beach, Henry B., West Meriden, Conn. Ice-pitcher.	Oct. 8, 1878	462	133	14	557



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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & C.	Vol.	Page.
202, 980	Beach, Henry B., West Meriden, Conn. Ice-pitcher.....	Apr. 30, 1878	1230	355	13	783
208, 056	Same.....Double-walled pitcher.....	Sept. 17, 1878	520	155	14	424
208, 507	Same.....Syrup-pitcher.....	Oct. 1, 1878	51	16	14	406
208, 706	Same.....Spoon-holder.....	Oct. 8, 1878	268	76	14	532
209, 446	Same.....Ice-pitcher.....	Oct. 29, 1878	1091	318	14	656
210, 234	Beach, Henry B., and Edgar B., West Meriden, Conn. Table-caster.....	Nov. 20, 1878	782	232	14	796
	Beach, Henry H. (See Rheutan, Garrie, assignor.)					
209, 153	Beach, Henry L., Montrose, Pa. Scroll-sawing machine.....	Oct. 22, 1878	788	229	14	610
206, 526	Beach, Horace, Prairie du Chien, Wis. Curry-comb.....	July 30, 1878	1222	351	14	179
208, 143	Same.....Index.....	Sept. 17, 1878	610	180	14	435
	Beach, James C. (See Allen, Richard N., assignor.)					
201, 417	Beach, William G., New Haven, Conn. Loose-pulley lubricator.....	Mar. 19, 1878	696	212	13	530
206, 484	Beach, William W., assignor to Rudolph Meyer. New York, N. Y. Combined blotter and moistener.....	July 30, 1878	1103	315	14	164
200, 509	Beachman, Robert, Lyons, N. Y. Attachment to combination-locks.....	Feb. 26, 1878	744	218	13	371
203, 811	Beal, James S., Poland, Me. Pump.....	May 21, 1878	633	178	13	919
199, 178	Beal, Royal, Orfordville, N. H. Lathe for turning round or polygonal bodies.....	Jan. 15, 1878	483	143	13	91
	Beals, Samuel G. B. (See Belser & Beals.)					
	Beam, Alfred. (See Thornton & Beam.)					
	Beaman, Sarah A. (See Whitaker, Edgar A., assignor.)					
207, 478	Beamer, Valentine M., Xenia, Ind. Harness-buckle.....	Aug. 27, 1878	876	258	14	328
8, 331	Beames, William E., New York, N. Y. Armpit-shield..... (Reissue.)	July 16, 1878	776	222	14	115
205, 034	Bean, Charles, Pawtucket, assignor of one-half interest to Daniel W. Hayden, Providence, R. I. Combined ripping and cutting device.....	June 18, 1878	655	193	13	1106
209, 543	Bean, Edwin E., Boston, Mass., assignor to Consolidated Wax Thread Sewing Machine Company. Sewing-machine.....	Nov. 5, 1878	5	2	14	681
208, 144	Bean, John and Roscoe, Hudson, Mich. Filter.....	Sept. 17, 1878	610	180	14	435
200, 005	Bean, John C., Crossville, Ill. Cultivator.....	Oct. 15, 1878	604	{ 175 176 }	14	580
	Bean, Roscoe. (See Bean, John and Roscoe.)					
201, 734	Bean, Roscoe, Hudson, Mich. Pump.....	Mar. 26, 1878	961	294	13	572
204, 703	Bean, Russel Owen, Macedonia, Miss. Seed-planter.....	June 11, 1878	287	89	13	1056
207, 585	Bean, Samuel L., Washington, D. C. Millstone-exhaust apparatus.....	Sept. 3, 1878	2	1	14	349
	Beard & Brother. (See King, Phineas F., assignor.)					
	Beard, E. J., et al. (See King, Phineas F., assignor.)					
	Beard, G. N., et al. (See King, Phineas F., assignor.)					
204, 525	Beard, George N., Saint Louis, Mo. Bale-tie.....	June 4, 1878	97	33	13	1026
204, 790	Beard, James, Kent, Iowa. Steam-plow.....	June 11, 1878	386	114	13	1068
199, 683	Beard, John, Franklin, Ind. Fire-kindler.....	Jan. 29, 1878	1028	299	13	192
	Beard, John Russell, et al. (See Aldred, Thomas, assignor.)					
	Bearden, T. W., et al. (See Crossley, Columbus M., assignor.)					
202, 781	Beardsley, John Grover, Waupun, Wis. Washing-machine.....	Apr. 23, 1878	1009	290	13	751
202, 919	Beasley, Maria E., Philadelphia, Pa. Foot-warmer.....	Apr. 30, 1878	1172	337	13	775
	Beasley, William F. (See Labor, Thomas, assignor.) (Reissue.)					
	Beatson, David A. (See Porter & Beatson.)					
199, 684	Beattie, Cynthia Jane, Pueblo, Colo. Ointment.....	Jan. 29, 1878	1028	.....	13	192
206, 386	Beatty & Co., W. A. (See Rupert, John A., assignor.)					
	Beatty, Robert J., and Lewis Zimmerman, Steubenville, Ohio. Apparatus for receiving glass casts from molds.....	July 30, 1878	1073	307	14	161
200, 953	Beatty, Robert P., and John H. Haulenbeck, Norwalk, Conn. Hose.....	Nov. 19, 1878	465	141	14	751
	Beatty, William. (See Hodgdon, Israel H., assignor.)					
198, 835	Beatty, Thomas W. (See Gilbert, Cephas, assignor.)					
205, 233	Beaudry, Zotique, Worcester, Mass. Burnisher-head for boot and shoe machine.....	Jan. 1, 1878	112	32	13	26
	Beausoleil, Alfred, assignor of one-half interest to Nalbert Ruelle, Alpena, Mich. Vehicle-axle lubricator.....	June 25, 1878	876	259	13	1140
205, 342	Beausoleil, Alfred, and Joseph Morreau, Alpena, Mich. Faucet.....	June 25, 1878	995	294	13	1155
209, 794	Beaven, Samuel, San Paulo, Brazil. Drier for coffee, cocoa, &c.....	Nov. 12, 1878	289	86	14	723
199, 894	Beavers, Richard R., Humboldt, Ill. Whiffletree.....	Feb. 5, 1878	4	2	13	233
207, 795	Beche, Peter, Bath, Pa. Horse-power.....	Sept. 10, 1878	227	71	14	381
209, 216	Beck, Alfred, and Thomas Warwick, Birmingham, England. Felly for vehicle-wheels.....	Oct. 22, 1878	850	246	14	619
205, 521	Beck, Andrew, Waverly, Minn. Churning apparatus.....	July 2, 1878	60	18	14	17
8, 063	Beck, August, New York, N. Y., assignor to Louis and Joseph Dryfoos. Sewing-machine..... (Reissue.)	Jan. 29, 1878	1225	360	13	222
201, 382	Beck, August, New York, N. Y. Burglar-alarm.....	Mar. 19, 1878	592	182	13	516
208, 057	Same.....Wrench.....	Sept. 17, 1878	521	155	14	424
207, 384	Beck, George, assignor to Philip S. Justice, London, England. Nozzle for the escape of steam or gases under pressure.....	Aug. 27, 1878	777	231	14	316
199, 347	Beck, James P., Saint Louis, Mo. Combined heating furnace and range.....	Jan. 22, 1878	659	193	13	127
206, 921	Becker, Charles R., Baltimore, Md. Cigar-tip protector.....	Aug. 13, 1878	289	88	14	245
199, 776	Becker, Christopher, New York, N. Y. Weighing-scales.....	Jan. 29, 1878	1111	326	13	205
	Becker, Frederick. (See Becker, Valentine, assignor.)					
	Same..... (See Becker, Valentine and Frederick.)					
207, 842	Becker, John F., Hartford, Minn. Grain-separator.....	Sept. 10, 1878	275	85	14	387
207, 479	Becker, Leander, York, Pa. Feed-cutter.....	Aug. 27, 1878	877	258	14	328
209, 447	Becker, Leander, assignor to C. Lewis Thomas and J. Luther Kraber, York, Pa. Washing-machine.....	Oct. 29, 1878	1092	318	14	656
201, 904	Becker, Rudolph, Austin, Tex. Ironing-table.....	Apr. 2, 1878	46	12	13	605
206, 527	Becker, Valentine, assignor of one-half interest to Frederick Becker, Cincinnati, Ohio. Lever-press.....	July 30, 1878	1222	352	14	179
210, 901	Becker, Valentine and Frederick, Cincinnati, Ohio. Baling-press.....	Dec. 17, 1878	585	{ 161 162 }	14	916
8, 125	Beckett, John R., assignor, by mesne assignments, to self, Calvin B. and Darius N. Payson, and Solomon S. Rowe, Cushing, Me. Street-railway..... (Reissue.)	Mar. 19, 1878	804	245	13	544
209, 321	Beckford, Frank M., Bristol, N. H. Combined shoulder-brace and suspender.....	Oct. 29, 1878	963	281	14	637
	Beckley, Daniel, et al. (See Williamson, Daniel, assignor.)					
206, 922	Beckner, Samuel, Argos, Ind. Harrow.....	Aug. 13, 1878	289	88	14	245
8, 358	Beckwith, Amos, assignor to E. W. Davenport and J. A. Churchill, Saint Louis, Mo. Horse-collar..... (Reissue.)	Aug. 6, 1878	201	65	14	231
	Beckwith, James L., et al. (See Spear, Thomas, assignor.)					
203, 878	Beckwith, James Thompson, Cameron Mills, N. Y. Device for leveling and tramming millstones while at work.....	May 21, 1878	694	199	13	927
206, 074	Beckwith, Philo D., Dowagiac, Mich. Stove-grate.....	July 16, 1878	677	196	14	104
	Bedell, H. O., et al. (See Stockham, Jerome B., assignor.)					
208, 009	Bedford, Joseph T., New York, N. Y. Metal stamping, shearing, and punching machine.....	Sept. 17, 1878	471	141	14	417

*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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200, 966	Bedworth, Thomas. ( <i>See Ward &amp; Bedworth.</i> )					
201, 218	Bee, Asa, Lancaster, assignor to Oliver W. Turner, Harvard, Mass. Turbine water-wheel.	Mar. 5, 1878	142	46, 47	13	437
201, 905	Beebe, Calvin T., assignor to Withington & Cooley Manufacturing Company, Jackson, Mich. Crow-socket for scythe-fastenings.	Mar. 12, 1878	401	123	13	482
202, 508	Same. Scythe-fastening.	Apr. 2, 1878	47	12	13	605
	Beebe, Eugene W., Evansville, Wis. Gate.	Apr. 16, 1878	686	202	13	704
201, 383	Beecher, Frank H. ( <i>See Gerard, Frank C., assignor.</i> )					
200, 786	Beecher, James G., Grand Rapids, assignor of one-half interest to Caroline C. Bowling, Marshall, Mich. Sash-fastener.	Mar. 19, 1878	593	182	13	516
204, 522	Beecher, Lucius W., Westville, Conn. Fruit-basket.	Feb. 26, 1878	933	275	13	399
	Beecher, William F., assignor of two-thirds interest to Phillip Alleman and Augustus C. Gatchel, Cleveland, Ohio. Locomotive smoke-stack.	June 4, 1878	95	32	13	1026
208, 285	Beede, C. O., <i>et al.</i> ( <i>See Tyler, George L., assignor.</i> )					
200, 426	Beeman, Geraldo Alonzo, and John Thomas Mason, Comanche, Tex. Pump.	Sept. 24, 1878	778	227	14	459
210, 289	Beer, Edwin B., Sussex, New Brunswick, Canada. Target.	Feb. 19, 1878	557	164	13	335
	Beermann, Charles. ( <i>See Davis &amp; Beermann.</i> )					
8, 384	Beers, Philo M., assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Needle-swaging machine.	Nov. 26, 1878	839	247	14	804
204, 526	Beers, Wheeler, Bridgeport, Conn., assignor, by mesne assignments, to Benjamin S. Pray, trustee, Boston, Mass. Axle for vehicles. (Reissue.)	Aug. 20, 1878	721	215	14	305
198, 786	Beeson, Thomas Babb, Wilmington, Del. Roofing-tongs.	June 4, 1878	97	33	13	1026
	Beeson, William, Battle Mountain, Nev. Car-step register.	Jan. 1, 1878	70	18	13	18
201, 864	Beggs, Eugene. ( <i>See Pennington &amp; Beggs.</i> )					
210, 083	Behle, Charles E. ( <i>See Schulze, Paul, assignor.</i> )					
208, 785	Behn, Henry, sr., New York, N. Y. Time-indicating night-lamp.	Apr. 2, 1878	6	2	13	509
201, 087	Behre, Conrad, Hopeville, N. J. Life-raft.	Nov. 19, 1878	606	180	14	769
209, 601	Beidler, George A., Philadelphia, Pa. Lantern.	Oct. 8, 1878	350	100	14	543
	Beiersdorf, Jacob, Chicago, Ill. Rocking-chair.	Mar. 12, 1878	270	84	13	463
	Beins, Henry W., New York, N. Y. Steam-trap.	Nov. 5, 1878	68	20	14	690
203, 237	Belanger, Nelson. ( <i>See Lockett &amp; Belanger.</i> )					
209, 217	Belden, Henry S., Canton, Ohio. Street-lamp.	May 7, 1878	2	1	13	821
201, 488	Bellcard, Jules, Macon, France. Let-off mechanism for looms.	Oct. 22, 1878	851	246	14	619
202, 139	Bell, Alexander G., Boston, Mass. Speaking-telephone.	Mar. 19, 1878	697	213	13	531
	Bell, A. John, Kokomo, Ind. Lavatory.	Apr. 9, 1878	298	88	13	646
204, 943	Bell, Daniel F., <i>et al.</i> ( <i>See Eubank, Reuben B., jr., assignor.</i> )					
202, 692	Bell, Gaylord, Cheyenne, Wyo. Driving attachment for sewing-machines.	June 18, 1878	570	166	13	1094
202, 509	Bell, George C., Brooklyn, assignor to Willis Van Tyne, New York, N. Y. Educational and advertising cards.	Apr. 23, 1878	919	263	13	739
208, 145	Bell, Henry and James, and Joseph James Coleman, Glasgow, Scotland. Refrigerating apparatus.	Apr. 16, 1878	687	202	13	705
208, 146	Bell, Henry, Saint Louis, Mo. Tooth-powder box.	Sept. 17, 1878	611	181	14	436
198, 733	Same. Bottle-stopper.	Sept. 17, 1878	612	181	14	436
	Bell, I. Lowthian, Rounton Grange, England. Manufacture of iron and steel.	Jan. 1, 1878	1		13	9
207, 843	Bell, J. Snowden, <i>et al.</i> ( <i>See Caum, Edward L., assignor.</i> )					
202, 510	Bell, James. ( <i>See Bell &amp; Coleman.</i> )					
	Bell, James C., Albany, and Patrick Costello, West Troy, N. Y. Dock.	Sept. 10, 1878	276	85	14	387
210, 657	Bell, Miller G., Glen Gardner, N. J. Harvester cutter-bar.	Apr. 16, 1878	689	202	13	705
203, 402	Bell, William. ( <i>See Potter &amp; Sloane, assignors.</i> )					
210, 983	Bell, William Turnbull, New York, N. Y., and Joseph Goldsack, jr., Jersey City, N. J.; said Goldsack assignor to said Bell. Centrifugal machine.	Dec. 10, 1878	302	82, 83	14	871
206, 160	Bellamy, Charles L., Arlington, N. J. Hand-drill.	May 7, 1878	173	50	13	844
207, 480	Bellenot, Charles, Richmond, Va. Sign.	Dec. 17, 1878	678	187	14	927
209, 376	Bellows, Benjamin F., Weeping Water, Nebr. Type-writing machine.	July 23, 1878	794	227	14	121
	Belou, Jacques, Paris, France. Car-truck.	Aug. 27, 1878	878	259	14	328
202, 219	Belser, James H., and Samuel G. B. Beals, Northborough, Mass. Lag for rag-pickers, &c.	Oct. 29, 1878	1022	297	14	646
209, 747	Belt, Jane, administratrix. ( <i>See Belt, William S.</i> )					
201, 983	Belt, William L., assignor of one-half interest to Daniel Smith, Washington, D. C. Gas and water valves for sewerage connections.	Apr. 9, 1878	385	112	13	657
	Belt, William S., deceased, Jane Belt, administratrix, Mount Washington, Ohio. Machine for making sheet-metal roofing.	Nov. 12, 1878	240	72	14	717
	Belue, Jacob Franklin, assignor of one-half interest to John A. Wiley, Iuka, Miss. Water-bed fence.	Apr. 2, 1878	121	35	13	616
206, 765	Bement & Sons, E. ( <i>See Jarvis, Samuel E., assignor.</i> )					
206, 923	Bender, Frederick W. ( <i>See Lorenz &amp; Bender.</i> )					
208, 560	Bender, Samuel, assignor of one-half interest to Sidney Scrawner, Buchanan, Mich. Folding bedstead.	Aug. 6, 1878	109	35	14	220
202, 511	Bender, William, New York, N. Y. Bung.	Aug. 13, 1878	290	88	14	246
	Bendickson, Iver E., Cambridge, Wis. Food-cooker.	Oct. 1, 1878	104	31	14	503
	Bendix, George E., Brooklyn, assignor to Solomon P. Stoddard and Walter Lipe, New York, N. Y. Lock.	Apr. 16, 1878	689	202	13	705
209, 322	Benedict & Burnham Manufacturing Company. ( <i>See Blackham, Eli J., assignor.</i> )					
199, 017	Same. ( <i>See Hallas, James G., assignor.</i> )					
201, 320	Same. ( <i>See Locke, Edward A., assignor.</i> )					
	Same. ( <i>See Weedon, William N., assignor.</i> )					
	Benedict, David H., Newton, Iowa. Churn.	Oct. 29, 1878	964	281	14	638
	Benedict, Isaac A., West Springfield, Pa. Cultivator.	Jan. 8, 1878	307	90	13	64
	Benedict, Jacob, Plainwell, Mich. Hand-rake.	Mar. 19, 1878	531	163	13	507
	Benedict, Washington G. ( <i>See Miller &amp; Benedict.</i> )					
	Same. ( <i>See Miller, George F., assignor.</i> )					
205, 035	Benedict, Washington G., Orange Park, Fla. Preparing palmetto fiber and pipe-leaves for mattress-fillings.	June 18, 1878	656		13	1106
200, 853	Benezet & Co. ( <i>See Evans &amp; Sparks, assignors.</i> )					
209, 641	Benham, William L., assignor of one-half interest to C. H. Norris, Detroit, Mich. Envelope.	Mar. 5, 1878	40	14	13	421
210, 902	Benjamin, Fred W., Sheffield, Ohio. Potato-digger.	Nov. 5, 1878	116	34	14	696
	Benjamin, Park. ( <i>See Rose &amp; Benjamin.</i> )					
	Benner, Lorenzo D., assignor of one-half interest to Risley C. Haines, Galesburg, Ill. Inside blind.	Dec. 17, 1878	586	162	14	916
208, 882	Benner, Mathias, <i>et al.</i> ( <i>See Lambert, Aloysius A., assignor.</i> )					
	Benner, Thomas M. Fire-kindler.	Oct. 15, 1878	470		14	563
204, 126	Bennesscheidt, Bruno. ( <i>See Giovannini &amp; Bennesscheidt.</i> )					
	Bennet, Lyman, Amsterdam, N. Y. Apparatus for warming and ventilating buildings.	May 28, 1878	982	280	13	967

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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200, 019	Bennett, Cornelius, Clifton, Ariz. Blast and reverberatory furnace.....	Feb. 5, 1878	123	40, 41	13	252
210, 984	Bennett, Daniel, Baldwin Township, Allegheny County, Pa. Manufacture of glass...	Dec. 17, 1878	678	187	14	927
8, 068	Bennett, Ensign. (See Bucklin, James Magee, assignor.)					
203, 104	Bennett, Erastus S., Brooklyn, N. Y., assignor, by mesne assignments, to George Frost and G. H. Phelps, Boston, Mass. Combined shirt and drawers..... (Reissue.)	Feb. 5, 1878	230	70	13	268
198, 924	Bennett, George P., Corning, Iowa. Apparatus for separating sand from water.....	Apr. 30, 1878	1345	391	13	798
8, 092	Bennett, George P., Corning, Iowa. Vehicle-hub.....	Jan. 8, 1878	216	61	13	49
209, 602	Bennett, James O. A., Morrison, Ill. Barrel-truck..... (Reissue.)	Feb. 19, 1878	734	215	13	362
	Bennett, John F., Pittsburgh, Pa. Fluid-pressure regulator.....	Nov. 5, 1878	70	20	14	690
	Bennett, Lewis J. (See Cummings & Bennett.)					
	Bennett, Lorenzo, <i>et al.</i> (See Bennett, William A., assignor.)					
	Bennett, N. M. (See Witsil, George L., assignor.)					
209, 748	Bennett, Samuel W., <i>et al.</i> (See Pearce & Taft, assignors.)..... (Reissue.)					
209, 727	Bennett, Thomas G., New Haven, Conn. Magazine-gun.....	Nov. 12, 1878	241	72	14	717
199, 895	Bennett, Townsend L., East Templeton, Mass. Fire-escape.....	May 14, 1878	324	91	13	873
	Bennett, William A. (See Olin, Zwiebel & Bennett.)					
208, 147	Bennett, William J., assignor to self, Lorenzo Bennett, and Leman A. Brace, Augusta, Wis. Shingle-packing machine.....	Feb. 5, 1878	4	2	13	233
207, 385	Bennett, William J., assignor of one-half interest to J. L. Brown, Fox Lake, Wis. Elevator-bucket.....	Sept. 17, 1878	612	181	14	436
200, 642	Bennison, John, Galveston County, Tex. External window, door, and shutter sprinkler.	Aug. 27, 1878	778	232	14	317
206, 215	Bennor, Joseph, and Philander Pond, Philadelphia, Pa.; said Bennor assignor to said Pond. Register.....	Feb. 26, 1878	788	232	13	378
	Bensel, Jacob, Stockton Township, Camden County, assignor to Augustus Reeve, Camden, and Jehu Wood, jr., Haddonfield, N. J. Refrigerator.....	July 23, 1878	856	244	14	129
210, 444	Bensinger, Hiram Elijah. (See Brocius, Bensinger & Wragg.)					
209, 853	Benson, Arza M., Cleveland, Ohio. Machine for dressing staves.....	Dec. 3, 1878	56	13, 14	14	831
207, 586	Benson, Jesse, Champaign County, Ohio. Windmill.....	Nov. 12, 1878	351	105	14	732
	Benson, William D. (See Lumpkin & Benson.)					
	Benstine, Joseph, and Charles H. Osborn, Oconomowoc, Wis. Clothes-drier.....	Sept. 3, 1878	3	1, 2	14	349
203, 314	Bentley, Henry, <i>et al.</i> (See Nicholson, Francis P., assignor.)					
	Bentley, Richard. (See Bentley, William and Richard.)					
	Bentley, William. (See Bright, James, assignor.)					
199, 495	Bentley, William and Richard, Newark, N. J. Champagne-tap.....	May 7, 1878	86	25	13	831
201, 865	Benton, Charles W. (See Edmonds, John W., assignor.)					
198, 925	Benton, Samuel, Baltimore, Md. End for burial-cases.....	Jan. 22, 1878	803	235	13	149
210, 745	Benton, Thomas P., Prairie du Sac, assignor of two-thirds interest to J. K. Mansfield, Eau Claire, and David Mansfield, Baraboo, Wis. Millstone-dresser.....	Apr. 2, 1878	7	2	13	600
200, 971	Benwell, Henry Robert, Newark, N. J. Chill-mold for casting metal.....	Jan. 8, 1878	216	61	13	49
205, 827	Berchold, Fidel, Cleveland, Ohio. Manufacture of steel.....	Dec. 10, 1878	393	14	14	883
202, 512	Berdan, Addison, and Amander E. Warren, Tecumseh, Mich. Wrench.....	Mar. 5, 1878	149	48	13	438
	Berdan, Isaac, Chatfield, Minn. Sulky for plows.....	July 9, 1878	410	117	14	65
	Berg, Heinrich, Meinhardt, near Hard-on-the-Seig, Germany. Pump.....	Apr. 16, 1878	691	203	13	705
208, 668	Berg, Theodore O., <i>et al.</i> (See Tysdal, Knud, assignor.)					
	Bergqvist, Charles. (See Marsh & Bergqvist.)					
199, 685	Berglund, Alexander, New Ulm, and Thomas Forstner, Sigeltown, Minn. Corn-planter.	Oct. 8, 1878	227	65	14	527
207, 238	Berglin, John. (See Hitchcock, Moses Lorenzo, assignor.)					
	Bergman, Hjalmar, Stockholm, Sweden. Door and window fastening.....	Jan. 29, 1878	1029	300	13	192
	Bergmann, John, assignor to self and J. Pedder, Beaver Falls, Pa. Manufacture of hoes.....	Aug. 20, 1878	616	184	14	290
190, 401	Bergstesser, E. L., <i>et al.</i> (See Bergstesser, Stewart L., assignor.)					
210, 445	Bergstesser, Edwin L., Hublersburg, Pa. Corn-planter.....	Jan. 22, 1878	715	211	13	135
8, 120	Bergstesser, J. B., <i>et al.</i> (See Bergstesser, Stewart L., assignor.)					
	Bergstesser, Stewart L., Condorsport, assignor to E. L. and J. B. Bergstesser, Hublersburg and Renova, Pa. Camera.....	Dec. 3, 1878	59	14	14	831
	Bergstrom, Andrew, Minneapolis, Minn., assignor of part interest to W. J. Fender, W. L. Bassett, and S. B. Chase. Piston water-meter..... (Reissue.)	Mar. 12, 1878	522	160	13	498
	Bergstrom, Charles. (See Golucke, Edmund, assignor.)					
	Bergstrom, Lars G. (See Thompson & Bergstrom.)					
	Bering, J. Ed., <i>et al.</i> (See Brown, William D., assignor.)					
	Bering, James E. (See Chambers & Bering.)					
208, 883	Berlin, George W. (See Palmer, John W., assignor.)					
199, 141	Berlin, Trevanion N., Farmington, Minn. Medicated pessary.....	Oct. 15, 1878	470	135	14	563
209, 642	Berliner, Emile, Washington, D. C. Telephone.....	Jan. 15, 1878	447	132	13	85
	Berlitz, Maximilian D., Providence, and Henry P. Morgan, Westerly, assignors of one-third interest to Elliot Holbrook, Providence, R. I. Balance spring for time-keeper.	Nov. 5, 1878	117	34	14	697
	Bernard, F. H. (See James, Joseph P. R., assignor.)					
	Bernard, G. S., <i>et al.</i> (See Goodwyn, George W., assignor.)					
207, 159	Berndt, Paul. (See Baldernann, Johann, assignor.)					
204, 944	Berney, William, Somerville, Mass. Handsaw.....	Aug. 20, 1878	531	160	14	280
	Bernhard, August, Milwaukee, Wis. Cradle.....	June 18, 1878	571	167	13	1095
	Bernhard, Charles. (See Juengst & Bernhard.)					
	Same..... (See Juengst, George and Charles A., assignors.)					
207, 099	Bernainghaus, Eugene, Cincinnati, Ohio. Barbers' chair.....	Aug. 20, 1878	478	143	14	273
203, 105	Bernstein, Aron, Friedenau, Prussia. Liquid measure.....	Apr. 30, 1878	1346	391	13	798
208, 058	Berry, Austin, Warden, Quebec, Canada. Car-truck.....	Sept. 17, 1878	521	156	14	424
199, 777	Berry, Frank Scott, Mercer, Me. Stove-leg.....	Jan. 29, 1878	1112	326	13	205
200, 686	Berry, Henry, assignor of one-half interest to F. Ratcliff, West Meriden, Conn. Cup and other vessels.....	Feb. 26, 1878	837	246	13	385
203, 106	Berry, Henry, West Meriden, Conn. Jewel-casket.....	Apr. 30, 1878	1347	392	13	798
207, 003	Berry, James L., Saginaw, Mich. Insertible saw-teeth.....	Aug. 13, 1878	366	112	14	255
207, 100	Same..... Car-coupling.....	Aug. 20, 1878	478	144	14	273
8, 349	Berry, John, assignor to National Needle Company, Springfield, Mass. Machine for polishing the eyes of machine-needles..... (Reissue.)	July 23, 1878	1067	306	14	156
8, 350	Same..... Art of polishing the eyes of machine-needles..... (Reissue.)	July 23, 1878	1068	306	14	156
	Berry, Larkin M. (See Wayland & Berry.)					
	Berry, Nelson H., <i>et al.</i> (See McKee, John, assignor.)					
201, 489	Berry, Richard D., <i>et al.</i> (See Redmond, Charles C., assignor.)					
203, 580	Berryman, Craton, Monroe, Wis. Corn-planter.....	Mar. 19, 1878	697	213	13	531
201, 984	Bersch, Josef, Baden, Austria, assignor of one-half interest to Henry Gath, New York, N. Y. Ventilating-bung.....	May 14, 1878	381	108	13	880
205, 783	Berst, Conrad, Warsaw, Ind. Weighing-scale.....	Apr. 2, 1878	122	35	13	617
	Bert, Gustave W., assignor of one-half interest to William M. Bower, Philadelphia, Pa. Bung and tap bushing.....	July 9, 1878	362	104	14	58



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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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206, 216	Berth, William R. E., assignor to Thomas Nelson & Sons, New York, N. Y. Book-holder.	July 23, 1878	857	244	14	129
8, 242	Bertram, Leopold Beral, New Wandsworth, England. Writing-pen. (Reissue.)	May 21, 1878	964	275	13	961
205, 828	Bertrand, Frank T., Rockford, Ill. Cultivator.	July 9, 1878	411	117	14	65
204, 417	Besler, John, Pittsburg, Pa. Manufacture of picks, &c.	June 4, 1878	4	1, 2	13	1013
207, 707	Best, Alcuin H., Savannah, Ga. Motor for dental engines.	Sept. 3, 1878	125	38	14	365
201, 735	Best, Frederick W. E., et al. (See Thomas, David, assignor.)	Mar. 26, 1878	962	294	13	572
	Best, James F., Galva, Ill. Harness-pad machine.					
	Best, John T. (See Hobart & Best.)					
200, 020	Bestor, Francis L. (See Baker & Bestor.)	Feb. 5, 1878	124	41	13	252
	Beswick, William H., et al. (See Hibbert, John, assignor.)					
204, 185	Bettis, James R., assignor to Carl Schraubstadter, and James A. St. John, Saint Louis, Mo. Type.	May 28, 1878	1052	{ 298 299 }	{ 13 13 }	976
	Bettis, Tillman C., and J. Wilson Heath, assignors to Randle, Heath & Livermore, Memphis, Tenn. Horse-power.					
208, 148	Bettridge, Abraham, Racine, Wis. Refrigerator.	Sept. 17, 1878	613	181	14	436
199, 018	Betta, Lewis F., assignor of one-half interest to Joseph S. Dennis and Henry N. Wheeler, Chicago, Ill. Barbed fence material.	Jan. 8, 1878	308	90	13	64
200, 816	Same. Combined ventilating nozzle and spout.	Mar. 5, 1878	2	1	13	415
207, 239	Betta, Robert W., Brooklyn, N. Y. Making paper card-baskets.	Aug. 20, 1878	616	185	14	290
203, 528	Betta, Stephen N., Hillsdale, assignor of one-half interest to William S. Schermerhorn, Reading, Mich. Stove.	May 14, 1878	325	92	13	873
207, 941	Betz, Eugen, assignor to Adolph Shoening, Chicago, Ill. Carriage-top standard.	Sept. 10, 1878	387	116	14	401
204, 704	Benkler, William, New Haven, Conn. Plaiting-machine.	June 11, 1878	288	89, 90	13	1056
203, 993	Beran, Samuel, assignor to Henry Disston & Sons, Philadelphia, Pa. Saw-grinding machine.	May 21, 1878	820	235	13	943
201, 150	Bevin Brothers Manufacturing Company. (See Nichols, William H., assignor.)	Mar. 12, 1878	336	103	13	472
	Bevins, Seth H., New York, N. Y., Joseph Weis, Jersey City, N. J., and William H. Phillips, New York, N. Y. Brake mechanism for hoisting apparatus.					
202, 981	Bevins, Seth H., New York, N. Y. Boiler-furnace.	Apr. 30, 1878	1251	355	13	783
208, 562	Beyer, A. (See Shrake, Frederick T., assignor.)	Oct. 1, 1878	107	31	14	502
	Beyer, Auguste, Paris, France. Machine for grinding and mixing pasty substances.					
210, 399	Bibb, William C., sr., Athens, Ga. Baling-press.	Dec. 3, 1878	8	2	14	826
204, 267	Bichsel, George, Sedalia, Mo. Watch-regulator.	May 28, 1878	1151	329	13	989
203, 315	Bickel, Louis, Akron, Ohio. Corn-cutting implement.	May 7, 1878	87	25	13	832
206, 853	Bickelhaupt, Adam and George, New York, N. Y. Skylight.	Aug. 13, 1878	216	69	14	237
201, 985	Bickelhaupt, George. (See Bickelhaupt, Adam and George.)	Apr. 2, 1878	122	36	13	617
	Bickers, Garnet Ross, Farmville, Va. Pen-holder.					
209, 954	Bickford, Henry M., et al. (See McKee, John, assignor.)	Nov. 19, 1878	466	141	14	751
	Bickford, R. H., et al. (See Curtiss, William H., assignor.)					
205, 466	Bicknell, James W., Boston, Mass. Adjustable box for paper-calendering rollers.	July 2, 1878	4	2	14	9
202, 403	Biddle, Alfred R., Maroa, Ill. Check-roller.	Apr. 10, 1878	589	173	13	690
209, 603	Bidwell, Francis A., Norwich, Conn. Bolt for patching boilers.	Nov. 5, 1878	72	20	14	690
206, 075	Bigalow, Frederick, assignor of one-half interest to Peter Sames, Rockford, Ill. Feed-steamer.	July 16, 1878	678	196	14	104
200, 021	Bigelow, Allen J., Rossie, N. Y. Harvester-cutter.	Feb. 5, 1878	125	41	13	253
209, 643	Bigelow Carpet Company. (See Buzzell, John P., assignor.)	Nov. 5, 1878	117	34, 35	14	697
	Bigelow, Evere H. W., Boston, Mass. Corset.					
198, 867	Bigelow, Hobart E., et al. (See Johnson, Albert W., assignor.)	Jan. 1, 1878	146	42	13	31
198, 868	Bigelow, John, Philadelphia, Pa. Sweat-leather for hats.	Jan. 1, 1878	148	42, 43	13	32
210, 903	Bigelow, L. A., et al. (See Titus, Nathaniel J., assignor.)	Dec. 17, 1878	588	162	14	917
	Bigler, Casper S., Harrisburg, Pa. Brick-machine.					
206, 854	Bignall, Moses C., Saint Louis, Mo. Bucket for chain-pump.	Aug. 13, 1878	217	70	14	237
199, 402	Bijur, Asher, New York, N. Y. Shutter.	Jan. 22, 1878	716	211	13	135
207, 641	Same. same.	Sept. 3, 1878	62	18	14	357
201, 088	Bild, Gustav G., New York, N. Y. Press for making cigars.	Mar. 12, 1878	271	84	13	463
209, 154	Bilheimer, Cyrus F., et al. (See Lauffer, Simon D., assignor.)	Oct. 22, 1878	789	229	14	610
	Bill, Charles H., Waltham, Mass. Crayon-mold-section mold.					
209, 644	Bill, Edward L. (See Ewing & Bill.)	Nov. 5, 1878	118	35	14	697
	Bill, Edward L., Wheeling, W. Va. Adding-machine.					
204, 877	Billings, Frank, Cleveland, Ohio. Wire-barbing machine.	June 18, 1878	499	{ 145 146 }	{ 13 13 }	1085
205, 234	Same. Barbed fence-wire.	June 25, 1878	877	259	13	1140
209, 544	Same. Wire-barbing machine.	Nov. 5, 1878	6	2	14	681
204, 288	Billings, Harriet F., et al. (See Stevens, John L. and George W., assignors.) (Re-issue.)	May 28, 1878	1152	329	13	989
	Binder, Hermann, Saint Louis, Mo. Barrel-washer.					
204, 651	Bingham, E. W. (See Turl, George C., assignor.) (Reissue.)	June 11, 1878	234	74	13	1049
	Bingham, Edward W., Philadelphia, Pa. Brick-kiln.					
201, 588	Bingham, Henry W., et al. (See Cosgrove, William N., assignor.)	Mar. 26, 1878	818	249	13	551
	Bingham, Thomas, and Thomas J. McTighe, Pittsburg, Pa. Low-water signal for steam-boilers.					
8, 326	Bingham, Tracy F., Abromia, Mich. Device for destroying insects by fumigation. (Reissue.)	July 9, 1878	537	153	14	81
199, 611	Same. Device for destroying insects by fumigation.	Jan. 29, 1878	952	277	13	181
202, 091	Bink, Anthony, San Francisco, Cal. Folding carriage-door.	Apr. 9, 1878	249	73	13	639
209, 106	Binns, Henry, et al. (See Shackleton & Binns, assignors.)	Oct. 22, 1878	734	{ 212 213 }	{ 14 14 }	603
	Binns, Jonathan W., et al. (See Vañ, John E. and James B., assignors.)					
203, 581	Binns, Joseph P. (See Shackleton & Binns.)	May 14, 1878	381	108	13	881
	Binns, Leedham, near Bradford, York County, England. Machine for manufacturing bands, cords, or ropes.					
208, 050	Birch, John S., Orange, N. J. Wrench.	Sept. 17, 1878	522	156	14	454
210, 235	Same. Gun-wiper.	Nov. 26, 1878	783	232	14	796
200, 888	Birch, Thomas H., Cincinnati, Ohio. Charging-scoop and gas-retort.	Mar. 5, 1878	72	25	13	426
198, 787	Birch, William, Salford, England. Machine for opening, smoothing, spreading, and guiding fabrics.	Jan. 1, 1878	71	18	13	18
200, 427	Birch, William, Salford, Great Britain. Squeezing-machine for bleachers and dyers.	Feb. 19, 1878	558	164	13	335
205, 607	Bird, John, Pittsburg, Pa. Street-lamp.	July 2, 1878	147	45	14	28
199, 019	Birdsall, Richard M., Clinton, Wis. Refrigerator-car.	Jan. 8, 1878	308	91	13	64
201, 490	Birdsall, Thomas H. (See Dunn & Birdsall.)	Mar. 19, 1878	700	213	13	531
	Birdsell, John C. (See Abbott & Birdsell.)					
201, 490	Birdseye, Isaac W., Birmingham, Conn. Corset.	Mar. 19, 1878	700	213	13	531
	Birdseye, Isaac W., Birmingham, Conn. Corset.					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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205, 717	Birdseye, Daniel M., Syracuse, N. Y. Bench-dog	July 9, 1878	288	85	14	49
203, 529	Birge, Jirah B., Daniel J. Woodward, and Guilford D. Rowell, Appleton, Wis. Seed- ing-machine	May 14, 1878	320	92	13	873
209, 045	Birge, Lewis, and Charles D. Williams; said Birge assignor to Henrietta Hildebrand, Saint Paul, Minn. Fire-alarm telegraph	Nov. 5, 1878	119	35, 36	14	697
208, 456	Birge, Manning, D., and George C. Skidmore, assignors to O. C. Haskill, Chicago, Ill. Corset	Oct. 1, 1878	2	1	14	489
205, 718	Birkenhead, John, Mansfield, Mass. Spindle-bearing for spinning-machines	July 9, 1878	289	85	14	49
210, 400	Same Spinning-ring and spindle support	Dec. 3, 1878	9	3	14	826
201, 986	Birnbaum, George J., et al. (See Hanks, Oscar, assignor.)					
209, 323	Bishop, Abner W., Berea, Ohio. Boiler-cleaner	Apr. 2, 1878	123	36	13	617
207, 240	Bishop, Francis A., San Francisco, Cal. Pumping apparatus for raising water	Oct. 29, 1878	965	281	14	638
207, 240	Bishop, George W., Brooklyn, N. Y. Velocipede	Aug. 20, 1878	617	185	14	290
203, 403	Bishop, J. H. (See Pitts, William Curtis, assignor.)					
200, 499	Bishop, Jason S., Fillmore, N. Y. Oil-well-drilling apparatus	May 7, 1878	173	50	13	844
200, 499	Bishop, Joshua, assignor of one-half interest to James Forno, Philadelphia, Pa. Driv- ing-gear for street-cars	Feb. 19, 1878	625	184	13	345
200, 889	Bishop, Orris A., assignor of one-half interest to W. E. Geer, Chicago, Ill. Device for forming cigar-wrappers	Mar. 5, 1878	73	25	13	426
201, 151	Bishop, Rufus G., Chetopah, Kans. Balanced slide-valve	Mar. 12, 1878	837	104	13	472
201, 219	Bishop, Thomas T., Atlanta, Ga. Hinge	Mar. 12, 1878	401	123	13	482
205, 036	Bishop, William, New York, N. Y. Water-closet	June 18, 1878	657	103	13	1106
205, 467	Bissell, Frank S. (See Killin, John M., assignor.)					
205, 467	Bissell, Frank S., Pittsburg, Pa. Self-extinguishing car-stove	July 2, 1878	5	2	14	9
205, 468	Same Car-heater	July 2, 1878	6	2	14	9
206, 855	Bissell, Lorenzo, and Richard Van Buren, Wadsworth, Ohio. Combined truck and bag-holder	Aug. 13, 1878	217	70	14	237
199, 612	Bissell, Melville R., Grand Rapids, Mich. Carpet-sweeper	Jan. 20, 1878	953	277	13	181
199, 179	Bissell, Thelus M. (See Knoblock & Bissell.)					
203, 404	Bisset, George, Jr., assignor to self and William H. Knight, Quebec, Quebec, Canada. Collapsible core for casting	Jan. 15, 1878	485	143	13	92
210, 904	Bissmann, Christian, New York, N. Y. Spring shade-roller	May 7, 1878	174	50	13	844
199, 020	Same Sash-balance	Dec. 17, 1878	590	163	14	917
202, 404	Bitters, John. (See Poore, Moses, assignor.)					
201, 220	Black, Albert M., and James Babcock, Decatur, Ill. Combined check-rower and drop- per mechanism	Jan. 8, 1878	309	91	13	64
200, 022	Black, Jeremiah E., et al. (See Hill & Jayne, assignors.) (Reissue.)					
202, 404	Black, Samuel, Union Grove, Iowa. Door-latch	Apr. 10, 1878	589	173	13	690
201, 220	Black, Willie, Cincinnati, Ohio, assignor to John A. Crawford, Covington, Ky. Device for handling hogsheds of tobacco	Mar. 12, 1878	402	123	13	482
205, 829	Blackburn, Frederick, and Valentine Moalein, assignors of three-fifths interest to Henry Friedberger and H. L. and B. Strouse; said B. Strouse assignor to said Friedberger, Philadelphia, Pa. Straw-braid-sewing machine	Feb. 5, 1878	126	42	13	253
205, 469	Blackburn, Frederick, and Valentine Moalein, assignors of three-fourths interest to Henry Friedberger and Henry L. Strouse, Philadelphia, Pa. Mechanical movement	July 9, 1878	412	117	14	65
209, 448	Blackburn, Henry, Nashville, Tenn. Preserve-jar and can	July 2, 1878	7	2	14	10
199, 254	Blackburn, Jacob C., et al. (See Stewart, Edward, assignor.)					
209, 448	Blackhall, Edward Wakefield, Toronto, Ontario, Canada. Paper-perforating machine	Oct. 29, 1878	1093	318	14	656
210, 236	Blackham, Eli J., assignor to Wilmot Manufacturing Company, Bridgeport, Conn. Lamp	Jan. 15, 1878	552	162	13	102
209, 324	Blackham, Eli J., Bridgeport, assignor to Benedict & Burnham Manufacturing Com- pany, Waterbury, Conn. Lamp-burner	Nov. 26, 1878	783	232	14	796
209, 324	Blackinton, Virgil H., Attleborough, Mass. Safety-pin	Oct. 29, 1878	966	281	14	638
203, 994	Blacklock, Allan R. (See Chambers, James Wright, assignor.)					
198, 734	Blackman, Austin B. (See Blackman & Griffing.)					
203, 994	Blackman, Ebenezer, Brooklyn, N. Y. Oil stove or lamp	May 21, 1878	822	236	13	944
200, 604	Blackman, Francis M. and Austin B., and David T. Griffing, De Kalb, Ill. Water- carrying truck	Jan. 1, 1878	3	1	13	9
208, 060	Blackman, Harlan P., et al. (See Hand & Caulier, assignors.)					
203, 107	Blackman, Harlan P., assignor of one-half interest to Charles S. Greene, Philadelphia, Pa. Wardrobe-bedstead	Nov. 5, 1878	72	21	14	690
208, 707	Blackmer, James L., assignor of one-half interest to James W. Tufts, Boston, Mass. Sign	Sept. 17, 1878	523	156	14	424
203, 107	Blackstone, Beverly, Warren, Ill. Horse-tail tie	Apr. 30, 1878	1348	392	13	799
207, 156	Blackwill, George W., Cedar Rapids, Iowa. Churn	Oct. 8, 1878	269	77	14	532
207, 156	Blagburn, Charles. (See Menzies & Blagburn.)					
201, 737	Blain, John Harvey, Round Rock, Tex. Horse-power	Aug. 20, 1878	529	159	14	279
205, 844	Blair, A. Furman. (See White, J. Atwood, assignor.)					
205, 844	Blair, Brice X., Huntingdon, Pa. Bag-fastening apparatus	Mar. 26, 1878	963	294 295	13	573
205, 844	Same Spectacles	Sept. 10, 1878	277	85	14	367
201, 589	Blair, Elijah S., Wilkesborough, N. C. Horse-rack	July 2, 1878	61	18	14	17
207, 241	Blair, George W., Pittsburg, Pa. Flaring and crimping glassware	Mar. 26, 1878	819	249	13	551
201, 491	Same Preparing articles of glassware for the purpose of shaping and fin- ishing	Aug. 20, 1878	620	185	14	291
199, 496	Blair, John, Boston, Mass. Bung and bush	Mar. 19, 1878	700	214	13	531
207, 101	Blair, Richard. (See Moore, Thomas M., assignor.)					
207, 157	Blair, William M., Williamsport, Md. Corn-shelling machine	Jan. 22, 1878	803	236	13	150
200, 890	Blake, Charles W., Portland, Me. Blackboard-compass	Aug. 20, 1878	479	144	14	273
201, 089	Blake, Charles W., Lyndon, Kans. Machine for attaching paper-fasteners	Aug. 20, 1878	529	159	14	279
201, 089	Blake Crusher Company. (See Marsden, Samuel L., assignor.)					
205, 719	Blake, George F., Boston, Mass. Steam-pumping engine	Mar. 5, 1878	73	25, 26	13	426
201, 987	Blake, Harry E., Flushing, N. Y. Telegraph-key	Mar. 12, 1878	272	84	13	464
207, 340	Blake, James C., et al. (See Marable, Thomas Edward, assignor.) (Reissue.)					
207, 340	Blake, John Henry, North Auburn, Me. Stove	July 9, 1878	290	85, 86	14	49
207, 340	Blake, Lyman R., Boston, Mass. Boot and shoe sewing machine	Apr. 2, 1878	124	36, 37	13	617
210, 084	Same same	Aug. 27, 1878	731	219	14	311
210, 170	Blake Manufacturing Company, George F. (See Hall, Albert F., assignor.)					
203, 844	Blake, Richard C., assignor to Blake Steam Gage Company, Hamilton, Ohio. Steam- gage	Nov. 26, 1878	723	215	14	799
203, 844	Blake, Robert, and Stephen A. Davis, Newark, N. J. Device for engaging pulleys to wheels	Oct. 15, 1878	471	135	14	563
210, 084	Blake Steam Gage Company. (See Blake, Richard C., assignor.)					
210, 084	Blake, William S., Boston, Mass., assignor to self and William H. Brown, Waterbury, Conn. Bracket-rod	Nov. 19, 1878	607	180	14	769

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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199, 613	Blakeley, Joseph, Toronto, Ontario, Canada. Car-axle box.	Jan. 29, 1878	954	278	13	181
206, 657	Blakeslee, Charles W., assignor of one-half interest to Joseph H. Hopkins and Levi S. Wooster, Northfield, Conn. Snap-hook.	Aug. 6, 1878	1	1	14	207
204, 705	Blakeslee, Harvey D. (See Latta, Emmet G., assignor.)					
201, 730	Blakeslee, John R., Cleveland, Ohio. Nut-machine.	June 11, 1878	283	90	13	1056
203, 057	Blakesley, Alpheus M., Rock Island, Ill. Domestic oven.	Mar. 26, 1878	903	294	13	573
204, 418	Blakesley, Gilbert H., Bristol, Conn. Clock.	June 18, 1878	658	194	13	1106
204, 183	Blanchard, George A., Concord, N. H. Churn.	June 4, 1878	5	2	13	1013
	Blanc, Louis, New York, N. Y. Safety-brake for railway-trains.	May 28, 1878	1053	299	13	976
	Blancke, Julius. (See Stenberg, Oscar, assignor.)					
203, 341	Blankenship, Robert E., et al. (See Tucker, Sylvester J., assignor.)					
206, 700	Blatchford, George, Mitchell, Ontario, Canada. Reed-organ.	June 25, 1878	993	294	13	1155
190, 497	Blatchly, Ambrose, Kernville, Cal. Wire-rope way.	Aug. 6, 1878	45	14	14	212
8, 280	Blattner, Christian, et al. (See Schallenberger, George, assignor.)					
207, 481	Blauvelt, Gerrit F., New York, N. Y. Boot-cleaner.	Jan. 22, 1878	804	236	13	150
	Bledsoe, Boyd C. (See Moss, John H., assignor.)					
207, 481	Blessing, James H., Albany, N. Y., assignor, by mesne assignments, to Albany Steam Trap Company. Steam-trap. (Reissue.)	June 18, 1878	789	224	13	1124
207, 482	Blessing, James H., Albany, N. Y. Air-valve.	Aug. 27, 1878	878	259	14	328
207, 483	Same..... Drain-trap.	Aug. 27, 1878	880	259	14	329
207, 484	Same..... Pump-regulating valve.	Aug. 27, 1878	881	260	14	329
207, 485	Same..... Steam-trap.	Aug. 27, 1878	883	260	14	329
206, 701	Same..... Pump-regulating valve.	Aug. 27, 1878	886	261	14	329
190, 498	Bligh, John Pascoe, Saint Paul, Minn. Envelope.	Aug. 6, 1878	47	14	14	212
202, 982	Blincoe, John D., Lewisport, Ky., assignor of two-thirds interest to Horace G. Smith and Guy D. Howe. Harness-tug and attachment.	Jan. 22, 1878	806	236	13	150
205, 343	Bliss, Charles C., Norwich, Conn. Stop-cock or valve.	Apr. 30, 1878	1232	356	13	783
208, 062	Bliss, Charles H., Rochester, Minn. Device for holding and delivering coin.	June 25, 1878	995	295	13	1155
	Bliss, Edward N., and Joseph Davol, Providence, R. I.; said Bliss assignor to said Davol. Syringe.	Sept. 17, 1878	524	157	14	424
203, 879	Bliss, George H. (See Bliss, John and George H.)					
208, 061	Bliss, George N., et al. (See Dooley, Thomas Brown, assignor.)					
	Bliss, George N., Boston, Mass. Drying-machine.	May 21, 1878	695	199	13	927
	Bliss, John. (See Whitcomb & Bliss.)					
200, 891	Bliss, John and George H., Brooklyn, N. Y. Rotator for ships' logs.	Sept. 17, 1878	524	157	14	424
199, 403	Bliss, Jonathan. (See Winn & Bliss.)					
199, 404	Bliss, Josephine, Pringhar, Iowa. Kitchen-table.	Mar. 5, 1878	74	26	13	426
205, 830	Bliss, Orville S., Georgia, Vt. Steam culinary vessel.	Jan. 22, 1878	716	211	13	135
208, 063	Same..... Milk-cooler.	Jan. 22, 1878	717	211	13	136
202, 027	Bliss, Samuel, Chicago, Ill. Preserving fish, meat, &c.	July 9, 1878	413	14	65	
204, 701	Bliss, Samuel B., New York, N. Y. Soap-bubble pipe.	Sept. 17, 1878	528	157	14	424
	Bliss, William H., Norwich, Conn. Fire-arm.	Apr. 23, 1878	848	244	13	731
	Blodgett, David, New York, N. Y. Grater.	June 11, 1878	387	115	13	1068
200, 500	Blodgett, Lorin. (See Harkins, Charles, assignor.)					
	Bloom, Charles A., assignor to Perrin H. McGraw, McGrawville, N. Y. Corset.	Feb. 19, 1878	626	184	13	345
	Blood, Ernest R. (See Hallock & Blood.)					
204, 187	Bloom, Elias. (See O'Sullivan & Bloom.)					
200, 817	Bloom, Elias, Jackson, Miss. Mosquito-net frame.	May 28, 1878	1056	300	13	976
208, 280	Bloom, Hans Olsen, assignor of one-half interest to J. B. Raymond, Chicago, Ill. Coffee-polishing machine.	Mar. 5, 1878	4	1	13	415
207, 486	Bloomfield, Ellis S., Elizabeth, N. J. Manufacture of rope and cordage.	Sept. 24, 1878	770	14	459	
238, 004	Bloomingdale, Joel Y. (See Wynkoop & Bloomingdale.)					
	Bloomingdale, Joel Y., New Salem, N. Y., assignor to Washburn & Moen Manufacturing Company, Worcester, Mass. Bale-tie.	Aug. 27, 1878	888	261	14	330
	Blosser, Jacob. (See Blosser, Joseph Wenger, assignor.)					
	Blosser, Joseph Wenger, assignor to self and Jacob Blosser, Sarcoxie, Mo. Medicament for catarrh.	Sept. 17, 1878	526	14	424	
200, 428	Blossom, Joseph R., Brooklyn, N. Y. Bale-tie.	Feb. 10, 1878	559	165	13	335
203, 880	Same..... Baling-press.	May 21, 1878	696	199	14	927
203, 720	Same..... Bale-tie.	July 9, 1878	292	86	14	49
206, 070	Same..... Bale-band tightener.	July 16, 1878	679	197	14	104
204, 188	Same..... Baling-press.	Aug. 6, 1878	1	1	14	207
	Blount, Alexander C., Pascagoula, Miss. Gas-meter.	May 28, 1878	1056	300	13	976
203, 881	Blo-nt, Duncan F. (See Katcn, George B., assignor.)					
210, 935	Bluemel, Julius, San Francisco, Cal. Fare-register.	May 21, 1878	697	199	13	928
199, 778	Same..... Breech-loading fire-arm.	Dec. 17, 1878	591	163	14	917
201, 152	Blust, Charles, assignor to Schimper Brothers, New York, N. Y. Pocket-book frame.	Jan. 29, 1878	1113	327	13	205
199, 405	Bly, Norman, Crown Point, N. Y. Machine for reducing wood to paper-pulp.	Mar. 12, 1878	338	104	13	478
208, 361	Blye, Alphonso W., Syracuse, N. Y. Wood-incased barrel.	Jan. 22, 1878	718	212	13	130
210, 836	Blyth, John, Pittsburg, Pa. Machine for mining coal.	Sept. 24, 1878	855	249	14	409
199, 490	Blythe, John W., Mentor, Ohio. Plow-harness.	Dec. 17, 1878	493	139	14	906
	Boals, James A., Dismore, assignor to D. M. Bailey & Brothers, Cardville, Pa. Mail-bag catcher.	Jan. 22, 1878	806	236	13	150
199, 021	Boalf, Francis B., Bainbridge, N. Y. Hay-press.	Jan. 8, 1878	310	91	13	64
201, 321	Boardman, Lorenzo M., Saint Peter, Minn. Amalgamator for stamp-mills.	Mar. 19, 1878	531	163	13	507
203, 882	Boardman, Theron, Gray, N. Y. Harness.	Feb. 12, 1878	356	106	13	296
	Boardman, Thomas, Charlottetown, Prince Edward Island, Canada. Machine for inserting rivets.	May 21, 1878	698	200	13	928
200, 244	Bobbitt, Frank, Varna, Ill. Hat-holder.	Feb. 12, 1878	857	106	13	296
208, 503	Bobbitt, L. L., et al. (See Boyd, Jesse C., assignor.)					
203, 700	Bock, Martin, Hughesville, Drum's P. O., Pa. Clock-case.	Oct. 1, 1878	108	32	14	503
210, 906	Boda, William J., Columbus, Ohio. Frame for supporting wire mattresses.	May 14, 1878	500	142	13	895
205, 470	Bodart, Alphonse, Huy, Belgium. Pipe joint and coupling.	Dec. 17, 1878	592	163	14	917
210, 440	Bodenhamer, Levi Isaac, Kernersville, N. C. Stalk trimmer and cutter.	July 2, 1878	7	3	14	10
	Bodenstein, Otto, New York, N. Y. Ornamentation of fire-arms and other articles of metal.	Dec. 3, 1878	60	15	14	832
202, 220	Dodge, John Worthington, Canistota, N. Y. Tire-upsetter.	Apr. 9, 1878	386	113	13	658
8, 332	Bodv, William Christopher Dart, Virginia City, Nev. Clack-valve for pumps. (Reissue.)	July 16, 1878	770	222	14	115
204, 652	Boeckh, Charles, Toronto, Ontario, Canada. Brush-bridle.	June 11, 1878	236	74	13	1049
201, 088	Boehmler, Theodore, and Henry Edward Olbrich, Cedar Falls, Iowa. Fire-tube boiler.	Apr. 2, 1878	126	37	13	617
202, 693	Boekel, William, Philadelphia, Pa. Lamp.	Apr. 23, 1878	920	263	13	739
203, 405	Same..... Cap for battery-cell.	May 7, 1878	175	51	13	844

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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199, 181	Boeklen, Reinhold, Brooklyn, assignor to C. A. Waterbury, New York, N. Y. Tell-tale clock	Jan. 15, 1878	487	143	13	92
210, 658	Boesen, James P., assignor to Pauline Boesen, Hoboken, N. J. Clothes-line fastener	Dec. 10, 1878	303	83	14	872
	Boesen, Pauline. (See Boesen, James P., assignor.)					
202, 513	Boettcher, John G. L., Brooklyn, N. Y. Fish-guard for water-pipes	Apr. 16, 1878	692	203	13	705
206, 415	Boettner, Charles W., Peru, Ind. Wagon-brake lever	July 30, 1878	1105	310	14	164
	Bogart, Abraham L. (See Bogart, A. Livingston, assignor.)					
	Same. (See Smith, Adolph T., assignor.)					
	Same. (See Wright, Arthur W., assignor.)					
203, 406	Bogart, Abraham L., New York, N. Y. Electric gas-lighting burner	May 7, 1878	176	51	13	845
202, 694	Bogart, A. Livingston, assignor to Abraham L. Bogart, Jamaica, N. Y. Electric gas-lighting burner	Apr. 23, 1878	921	263	13	739
209, 016	Same. Electric apparatus for gas-burners	Oct. 15, 1878	619	180	14	583
	Bogart, William H. (See Mannie, George A., assignor.)					
201, 153	Bogenrief, Samuel H., and William Pattison, Saint Cloud, Minn. Plow	Mar. 12, 1878	339	104	13	473
201, 738	Boger, Ishmel, and William Henry King, assignors of one-third interest to Louis Kosiol, Louisville, Ky. Machine for grinding, smoothing, and polishing glass	Mar. 26, 1878	964	295	13	573
	Bogert, John B., et al. (See Wygant, John H., assignor.)					
	Boggs, George C., et al. (See Hixson, Ezra, assignor.)					
201, 643	Bogle, James S., Springfield, Ohio. Grain-drill	Mar. 26, 1878	875	{ 266 } 267	{ 13 } 13	559
207, 487	Bogue, James Isaac, Montreal, Canada. Calculator	Aug. 27, 1878	889	262	14	330
205, 171	Bohannan, Wilson, Brooklyn, N. Y. Padlock	June 25, 1878	808	240	13	1131
208, 708	Same. Latch	Oct. 8, 1878	269	77	14	532
206, 161	Bohlig, Edward, Eisenach, Germany. Purifying feed-water for boilers	July 23, 1878	797		14	121
210, 486	Boillot, Lucien J., Bonnot's Mills, Mo. Cloth-folding machine	Dec. 3, 1878	96	25	14	830
200, 245	Bois, James M., Salamanca, N. Y. Hydraulic motor	Feb. 12, 1878	357	106	13	296
208, 952	Boisset, Peter, New York, N. Y. Propelling vessels	Oct. 15, 1878	551	161	14	573
202, 695	Boland, Claude M., New York, N. Y. Glove-sewing machine	Apr. 23, 1878	922	{ 263 } 264	{ 13 } 13	739
204, 878	Bole, John, Knox P. O., Pa. Casing-spear for oil-wells	June 18, 1878	502	147	13	1085
	Bolick, John D. (See Bolick & Faucett.)					
210, 290	Bolick, Washington A. and John D., and John Thomas Faucett, Brighton, Tenn. Plow attachment	Nov. 26, 1878	840	247	14	804
8, 497	Bollmann, Louis, assignor to Mary Bollmann, Vienna, Austria. Grinding-machine. (Reissue.)	Nov. 10, 1878	710	{ 212 } 213	{ 14 } 14	783
	Bollmann, Mary. (See Bollmann, Louis, assignor.) (Reissue.)					
204, 945	Bolthoff, Henry, assignor to self and Charles F. Hendrie, Central City, Colo. Pulverizing apparatus	June 18, 1878	571	167	13	1095
	Bolton, George J. (See Brumbaugh, Samuel A., assignor.)					
205, 172	Bottum, Hamlet E., Cohoes, N. Y. Closing seam of sheet-metal roofs	June 25, 1878	809	240	13	1131
	Boman, Claes W. (See Hoffman & Roman.)					
203, 449	Boman, Claes W., assignor to Joseph Reckendorfer, New York, N. Y. Pencil-holder	Oct. 29, 1878	1095	318	14	657
	Bond, George W. (See Coffin, Joseph N., assignor.)					
8, 410	Bond, Henry F., Northborough, Mass. Sash-balance. (Reissue.)	Sept. 10, 1878	463	139	14	411
205, 944	Bond, Henry F., Lynnfield, Mass. Sash-balance	July 16, 1878	546	155	14	87
200, 818	Bond, Hiram, Haverhill, Mass. Shoe	Mar. 5, 1878	5	2	13	415
	Bond, James M., et al. (See McKinny, Stephen P., assignor.)					
	Bond, Joseph L. (See Stevens & Bond.)					
207, 242	Bonnell, James A., assignor of one-half interest to Frank C. Goodwin, Philadelphia, Pa. Iron cross-tie	Aug. 20, 1878	621	186	14	291
200, 420	Bonnet, Jacob, New York, N. Y. Adjustable foot-rest for hot-air registers	Feb. 19, 1878	500	165	13	335
199, 614	Bonnev, John J., Fulton, N. Y. Feather-renovator	Jan. 20, 1878	953	278	13	181
199, 779	Bonwill, William G. A., Philadelphia, Pa. Dental engine	Jan. 20, 1878	1114	327	13	206
209, 006	Bonwill, William G. A., Dover, Del., assignor to S. S. White, Philadelphia, Pa. Electro-magnetic dental plugger	Oct. 15, 1878	605	176	14	580
	Bonzano, Adolphus. (See Channell & Bonzano.) (Reissue.)					
204, 792	Bookwalter, J. W. (See Trump, Fuller, assignor.)					
209, 218	Bookwalter, John W., Springfield, Ohio. Steam-generator	June 11, 1878	387	115	13	1068
	Same. Steam-boiler furnace	Oct. 22, 1878	851	246	14	619
209, 219	Same. Turbine water-wheel	Oct. 22, 1878	852	{ 246 } 247	{ 14 } 14	619
	Bools, Zadock H. (See Wilson & Boole.)					
199, 022	Boon, William Minchew, Perry, Ga. Fertilizer-distributor	Jan. 8, 1878	311	92	13	64
201, 384	Boone, Isaac, Troy, Ohio. Cotton-harvester	Mar. 19, 1878	594	{ 182 } 183	{ 13 } 13	516
201, 385	Same. Hog-dressing machine	Mar. 19, 1878	596	183	13	516
206, 766	Boone, Perino, Maysville, Ga. Plow-stock	Aug. 6, 1878	110	35	14	220
200, 972	Boote, John J. K., and George L. Hochler, Cleveland, Ohio, assignor of one-half interest to Devane F. Sherbondy and Van Dorn Lillie, New York, N. Y. Fire-kindler	Mar. 5, 1878	149	49	13	438
	Booth, Elisha, et al. (See Hacker, David Fox, assignor.)					
205, 344	Booth, John W., Wayne, assignor to George C. Wetherbee, Detroit, Mich. Broom	June 25, 1878	996	295	13	1155
	Booth, Robert. (See Smith & Booth.)					
210, 659	Booth, Robert J., assignor of one-third interest to Washington C. Pearce, Des Arc, Ark. Gate-fastener	Dec. 10, 1878	304	83	14	872
210, 660	Same. Gate	Dec. 10, 1878	305	83	14	872
	Booth, Vincent C., et al. (See Hacker, David Fox, assignor.)					
207, 845	Booth, William, Newark, N. J. Machine for rounding off the ends of combs	Sept. 10, 1878	278	86	14	587
201, 492	Bopp, Christ, Jersey City, N. J., assignor to self and Henry C. Stone, Brooklyn, N. Y. Track-cleaner	Mar. 19, 1878	701	214	13	531
206, 856	Borchardt, Albert, Weehawken, N. J. Shirt-neck shaper	Aug. 13, 1878	218	70	14	237
203, 582	Borchardt, Hermann, Philadelphia, Pa. Child's carriage	May 14, 1878	382	108	13	881
206, 217	Borchardt, Hugo, Bridgeport, Conn., assignor to Sharps Rifle Company. Breech-loading fire-arm	July 23, 1878	857	245	14	129
199, 023	Borler, Daniel, assignor of one-half interest to Lloyd Walter, Bedford, Pa. Lock and key	Jan. 8, 1878	312	92	13	64
202, 782	Bordewich, Louis, Chicago, Ill. Still	Apr. 23, 1878	1011	290	13	751
205, 235	Bordwell, Joseph, assignor to Dayton S. Morgan, Brockport, N. Y. Harvester	June 25, 1878	877	{ 259 } 260	{ 13 } 13	1140
	Borger, Philipp. (See Gasser, Louis, assignor.)					
200, 246	Borgfeldt, Nicholas H., New York, N. Y. Tobacco-stem flattener	Feb. 12, 1878	300	107	13	297
202, 696	Same. Tobacco-stem crusher	Apr. 23, 1878	924	264	13	739
200, 430	Borgia, Felix J., Wilson, assignor of one-fourth interest to Frank J. McLean, Menomonee, Wis. Gate	Feb. 10, 1878	560	165	13	335

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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205, 903	Borland, William Patterson, and Herman Hoffmann, Leavenworth, Kans. Adding-machine	July 16, 1878	598	172	14	93
208, 786	Borneman, August, and Joseph A. Shepard, assignor to Hocking Valley Manufacturing Company, Lancaster, Ohio. Feed-cutter	Oct. 8, 1878	351	101	14	543
203, 316	Borst, George, Rochester, N. Y. Bung	May 7, 1878	87	25	13	832
200, 371	Borst, William E., Cobleskill, N. Y., assignor, by mesne assignments, to Washburn & Moen Manufacturing Company, Worcester, Mass. Wire bale-tie	Feb. 19, 1878	505	149	13	327
200, 967	Bortree, Lewis S., Toledo, Ohio. Corset	Mar. 5, 1878	145	47	13	438
206, 295	Boss, James, Berlin, Md. Fruit-carrier	July 23, 1878	940	268	14	141
202, 325	Bosse, Charles Lucien, et al. (See Whitney, Edwin R., assignor.) Bosse, H. C. (See Durand, Louis, assignor.)					
	Bostock, Edward, New York, and Louis T. Simon, Williamsburg, N. Y. Advertising apparatus	Apr. 10, 1878	513	150	13	679
8, 466	Bostwick, J. A., et al. (See Brock, William H., assignor.) Bostwick, Jabez A., New York, N. Y., assignor to E. M. Lang & Co., Portland, Me. Soldering-iron (Reissue)	Oct. 29, 1878	1194	347	14	670
199, 500	Bosworth, Charles F., Milford, Conn. Machine for sewing straw braid	Jan. 22, 1878	808	237	13	150
208, 221	Bosworth, George S., Troy, N. Y. Fuel-burner	Sept. 24, 1878	704	207	14	451
203, 407	Botlner, George, New York, N. Y. Piano-forte action	May 7, 1878	177	51	13	845
209, 220	Bott, Joseph E., assignor to Charles Odling, Nottingham, England. Injector	Oct. 22, 1878	853	247	14	619
207, 488	Bottom, Thomas J., Thomasville, Ga. Current-wheel	Aug. 27, 1878	890	262	14	330
	Botts, Sidney J., et al. (See McConoughey, Hulbert N., assignor.)					
199, 954	Bouchet, Peter, New York, N. Y. Reversible plow	Feb. 5, 1878	65	21	13	243
203, 238	Boufoey, Clarence P., assignor to Emma G. Boufoey, Middletown, Conn. Snap-hook	May 7, 1878	3	1	13	821
	Boufoey, Emma G. (See Boufoey, Clarence P., assignor.)					
	Boughton, C. Frank. (See Collins & Boughton.)					
209, 155	Boughton, Claudius V., Titusville, Pa. Ball-target	Oct. 22, 1878	790	220	14	610
200, 017	Boult, Myron T., Battle Creek, Mich. Broom	Oct. 15, 1878	621	180	14	583
	Bourdeau, Gideon. (See Brault, Agapit, assignor.)					
207, 480	Bourguignon, Wendel, Providence, R. I., assignor to Robert Gems, Boston, Mass. Flexible gas-tubing	Aug. 27, 1878	891	262	14	330
210, 907	Bourke, Martin, Youngstown, Ohio. Face-canopy	Dec. 17, 1878	593	163	14	917
210, 908	Same. Apparatus for raising and lowering boats	Dec. 17, 1878	593	164	14	917
	Bourke, William. (See Wellington & Bourke.)					
204, 706	Bourke, William, New York, N. Y. Sleeve-button	June 11, 1878	292	91	13	1057
	Bourn, Benjamin A., et al. (See Theobald, George, assignor.)					
204, 476	Bourne, Edward, Pittsburg, Pa. Riveting device	June 4, 1878	57	18, 19	13	1020
207, 380	Same. Nut-lock	Aug. 27, 1878	779	232	14	317
108, 964	Bourne, Henry H., Cloud County, Kans. Portable lime-kiln	Jan. 8, 1878	254	73	13	55
207, 004	Bouscay, Elol, Norwalk, Ohio. Sewing-machine shuttle	Aug. 13, 1878	367	112	14	255
	Boushey, Stephen. (See Jasper & Boushey.)					
200, 023	Boussard, Richard, assignor to self, A. and Joseph Schwarz, New York, N. Y. Button or stud fastening	Feb. 5, 1878	127	42	13	253
209, 156	Bovee, David William, Richland Centre, Wis. Hay-rake and loader	Dec. 22, 1878	791	229	14	610
205, 345	Bovee, George Ely, Convent, La. Cigarette	June 25, 1878	997	295	13	1156
203, 241	Bovey, George C., Columbus, Ohio, assignor to Abner Woodward, Shelburne Falls, Mass. Wall-protector	May 7, 1878	5	2	13	821
210, 487	Bovey, George C., Columbus, assignor of one-half interest to James A. Marsh, Cincinnati, Ohio. Sewing-chair	Dec. 3, 1878	98	25	14	837
207, 005	Bowden, John, Newtown, N. Y. Clip for vehicle-spring	Aug. 13, 1878	368	113	14	255
	Bowditch, J. F. (See Dillon, Thomas, assignor.)					
204, 190	Bowdoin, Frank A., Lewiston, Me. Pea-nut warmer	May 28, 1878	1059	301	13	977
205, 721	Bowdoin, James W., Beverly, Mass. Tree-protector	July 9, 1878	293	86	14	49
190, 255	Bowe, Patrick, Jersey City, N. J. Electric lock	Jan. 15, 1878	553	163	13	102
204, 189	Bowen, Charles P., Silver City, Idaho. Machine for pitting and cutting fruit	May 28, 1878	1058	300	13	977
	Same. Amalgamator	Oct. 1, 1878	52	17	14	406
208, 509	Bowen, Francis Clare, Brooklyn, N. Y. Artificial trees and flowers	July 30, 1878	1074	307	14	161
208, 709	Bowen, Frederick, Barnhart's Mills, Pa. Pump for oil-wells	Oct. 8, 1878	271	77	14	533
210, 085	Bowen, George W., and Emanuel Nichols, Grass Lake, Mich. Machine for making wooden barrel-hoops	Nov. 19, 1878	608	181	14	760
208, 508	Bowen, James H., Philadelphia, Pa. Roller-skate	Oct. 1, 1878	51	17	14	496
8, 441	Bowen, Jesse, Lancaster, Ohio. Cider-mill (Reissue)	Oct. 1, 1878	220	63	14	518
204, 946	Bowen, Newton M., Knightstown, Ind. Whiffletree-hook	June 18, 1878	572	167	13	1095
	Bowen, O. (See Howe, Moses A., assignor.)					
204, 475	Bowen, William Thomas, Ridgeway, Iowa. Stove-shelf and heating-drum	June 4, 1878	57	18	13	1020
210, 086	Bower, Henry, Philadelphia, Pa. Apparatus for the manufacture of ferrocyanide of potassium	Nov. 19, 1878	609	181	14	770
	Bower, William M. (See Bert, Gustave W., assignor.)					
208, 564	Bowers, Alexander, Dubuque, Iowa. Adjustable vehicle-top	Oct. 1, 1878	112	32	14	504
	Bowers, James. (See Geery, Samuel W., assignor.)					
208, 362	Bowers, James, Newark, N. J. Corset	Sept. 24, 1878	856	249	14	470
210, 488	Bowers, John, Baltimore, Md. Vapor-burner	Dec. 3, 1878	99	25	14	837
202, 140	Bowers, John Henry, Cowan, Tenn. Umbrella-holder	Apr. 9, 1878	300	88	13	646
210, 237	Bowers, Sylvester J., Canandaigua, N. Y. Horse-collar coupling	Nov. 26, 1878	784	232	14	796
206, 078	Bowes, Alden Partridge, Michigan City, Ind. Post for fences, &c	July 10, 1878	680	197	14	104
198, 985	Bowie, Edwin K., assignor to E. T. Covell, New Bedford, Mass. Can-seaming machine	Jan. 8, 1878	255	73	13	55
202, 141	Bowie, Henrietta, Houma, La. Medical compound	Apr. 9, 1878	300		13	643
	Bowker & Co., William H. (See Sturtevant, Thomas L., assignor.)					
202, 221	Bowles, David, Miser's Station, Tenn. Flood-gate	Apr. 9, 1878	387	113	13	658
206, 661	Bowles, John, Washington, D. C., and Abram P. Eastlake, Philadelphia, Pa. Revenue-stamp	Dec. 10, 1878	305	84	14	872
	Bowling, Caroline C. (See Beecher, James G., assignor.)					
206, 416	Bowman, Amos W., San Francisco, Cal. Railway-track	July 30, 1878	1106	316	14	165
	Bowman, Benjamin A. (See Clark & Bowman.)					
	Bowman, Edward, et al. (See Maranville, Galusha, assignor.)					
200, 630	Bowman, Hezekiah J., assignor of one-half interest to Martin Lauer, Cleveland, Ohio. Fire-escape	Feb. 26, 1878	745	218	13	371
199, 501	Bowman, John Calhoun, Pickens, Miss. Transplanting-tool	Jan. 22, 1878	810	237	13	151
202, 142	Bowman, Jonas, Somerset, Ohio. Running-gear for vehicles	Apr. 9, 1878	300	89	13	643
204, 707	Bowman, Jonas, assignor to self and Isaac Mechling, Somerset, Ohio. Vehicle-spring	June 11, 1878	293	91	13	1057
	Bowman, Selwyn Z. (See Martin, Pearl, assignor.)					
	Bowman, Silas. (See Clark & Bowman.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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206, 924	Bowman, Thomas S., Saint Louis, Mo. Numbering-machine .....	Aug. 13, 1878	290	88, 89	14	246
200, 968	Bowman, William H., assignor of one-half interest to John C. Hays, South Solon, Ohio. Cotton-planter .....	Mar. 5, 1878	145	47	13	438
199, 406	Bown, Thomas, South Charleston, Ohio. Can waxing or soldering apparatus .....	Jan. 22, 1878	720	212	13	136
210, 900	Bown, William, Birmingham, England. Horse-clipper .....	Dec. 17, 1878	594	{ 164 165 }	14	917
205, 236	Bonnaillon, Glaucus H., et al. (See Leclerc, Francis, assignor.) .....	June 25, 1878	879	260	13	1140
199, 955	Bowsher, Nelson P., South Bend, Ind. Plow .....	Feb. 5, 1878	66	21	13	243
199, 615	Box, Alfred, Philadelphia, Pa. Screw hoisting-pulley apparatus .....	Jan. 29, 1878	956	{ 278 279 }	13	181
208, 667	Boxley, George, assignor of one-half interest to Isaac V. Ford, Troy, N. Y. Machine for folding blanks for collars and cuffs .....	Oct. 8, 1878	226	65	14	527
208, 699	Boyce, Isaac B., Lynn, Mass. Nut for vehicle-axes .....	Oct. 8, 1878	228	65	14	527
199, 956	Same. Preventing the loss of nuts from axes .....	Feb. 5, 1878	67	21	13	243
8, 406	Boyce, Joseph B., Lockport, N. Y. Bench-plane .....	Sept. 10, 1878	459	138	14	416
198, 926	Boyd, C. S. (See Boyd, William S., third assignor.) .....	Jan. 8, 1878	217	61	13	49
208, 787	Boyd, James, et al. (See Acheson, William, assignor.) .....					
	Boyd, Jesse C., Milroy, Ind., assignor to self, C. P. Wilson, and L. L. Boblett. Cultivator .....					
	Boyd, John, Galveston, Tex. Portable house .....					
	Boyd, Joseph. (See Land, William Henry, assignor.) .....					
	Boyd, Samuel M., et al. (See Alexander, Abram, assignor.) .....					
	Boyd, William S., third assignor of one-half interest to C. S. Boyd, Philadelphia, Pa. Shaft for vehicles .....	Oct. 8, 1878	352	101	14	543
200, 164	Boyer, Joel Jerome, Lamartine, Pa. Torpedo for oil-wells .....	Feb. 12, 1878	284	84	13	285
199, 957	Boyer, John L., Cincinnati, Ohio. Applying nail-heads on metal roofing .....	Feb. 5, 1878	68	22	13	243
207, 708	Boyer, John S., Philadelphia, Pa. Thumb-stall for facilitating the sorting of letters .....	Sept. 3, 1878	126	39	14	305
8, 333	Boyer, William H., assignor, by mesne assignments, to Abner Greenleaf, Baltimore, Md. Sewing-machine table .....	July 16, 1878	777	222	14	115
203, 109	Boyers, James Peter, Finney's Grove, Mo. Animal-trap .....	Apr. 30, 1878	1350	393	13	799
206, 077	Boykin, Thomas J., and James W. Carmer, Baltimore, Md. Fertilizer .....	July 16, 1878	680		14	104
8, 172	Boyle, Christopher C. (See Smith & Boyle.) .....					
203, 108	Boyle, James E., Brooklyn, assignor, by mesne assignments, to H. W. Collender, New York, N. Y. Billiard-table cushion .....	Apr. 16, 1878	825	239	13	719
203, 883	Boyle, James E., assignor to Hugh W. Collender, New York, N. Y. Billiard-table .....	Apr. 30, 1878	1349	392	13	799
	Boyle, Jeremiah H., Delhi Mills, Mich. Vegetable-cutter .....	May 21, 1878	699	200	13	928
	Boyle, John. (See Macy, William H., assignor.) .....					
	Same. (See Wheeler, Charles E., assignor.) .....					
206, 662	Boyle, John, New York, N. Y. Reversible wagon-cover .....	Dec. 10, 1878	809	84	14	872
200, 819	Boyle, Thaddeus Walton, Augusta, Ga. Shovel-plow .....	Mar. 5, 1878	5	2	13	415
	Boynton, Cassimer W. (See Luckhurst, Walter, assignor.) .....					
	Boynton, D. P. (See Thompson, Actor P., assignor.) .....					
200, 165	Boynton, Eben Moody, New York, N. Y. Saw-handle .....	Feb. 12, 1878	285	85	13	285
201, 590	Boynton, Edward S., New York, N. Y. Book-sewing .....	Mar. 26, 1878	820	250	13	551
203, 530	Boynton, Edward Stanley, assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Book-sewing machine .....	May 14, 1878	327	{ 92 93 94 }	13	874
209, 646	Boynton, Edwin N., George M. Coburn, and Thomas F. Carver, assignors to Edwin N. Boynton, Worcester, Mass. Metal-drilling machine .....	Nov. 5, 1878	122	36	14	697
200, 247	Boynton, Nathaniel A., New York, N. Y. Cooking-range .....	Feb. 12, 1878	361	{ 107 108 }	13	297
207, 387	Boynton, Royal Bullard, West Townsend, Mass. Combined thill and harness .....	Aug. 27, 1878	780	232	14	317
204, 679	Bozerian, Eugene E. G., Paris, France. Hydrotherapic apparatus .....	June 18, 1878	503	147	13	1086
205, 994	Bozorth, John, Philadelphia, Pa. Box-trimming machine .....	July 16, 1878	690	173	14	94
	Braam, Matthew. (See Stallman, Granville H., assignor.) .....					
200, 248	Brabrook, Ezra H. (See Dill, Joseph, assignor.) .....					
	Brace, Julius, Covington, Ky. Preserving meats .....	Feb. 12, 1878	363		13	297
	Brace, Leman A., et al. (See Bennett, William A., assignor.) .....					
199, 256	Brace, William H., assignor of one-half interest to Julius B. Countryman, Nunda, N. Y. Torsion-spring for vehicles .....	Jan. 15, 1878	555	163	13	102
203, 110	Brach, Isidor, Philadelphia, Pa. Water-purifier .....	Apr. 30, 1878	1351	393	13	799
206, 296	Bracher, Thomas W., New York, N. Y. Sweat-band for hats and caps .....	July 23, 1878	948	268	14	141
210, 489	Same. Machine for producing brims on sweat-bands for hats and caps .....	Dec. 3, 1878	99	25, 26	14	837
210, 985	Same. Machine for producing brims on sweat-bands for hats and caps .....	Dec. 17, 1878	679	187	14	927
202, 607	Brackett, George A. (See Olmsted, Travis & Chute, assignors.) .....	Apr. 23, 1878	925	264	13	739
202, 326	Brackett, George A., Minneapolis, Minn. Grain-band .....	Apr. 16, 1878	514	151	13	680
207, 341	Brackett, John B., and Luther M. Merrill, Boston, Mass. Cotton-gin .....	Aug. 27, 1878	734	220	14	311
207, 243	Bradbury, Alphonse E., West Springfield, and Vinal B. Barstow, Westfield, Mass., assignors to selves and H. M. Smith. Car-coupling .....	Aug. 20, 1878	622	186	14	291
206, 162	Bradfield, John, Grand Rapids, Mich. Folding table .....	July 23, 1878	797	228	14	121
209, 157	Bradford, Addison, Amsterdam, N. Y. Speculum .....	Oct. 22, 1878	791	230	14	610
200, 123	Bradford, Charles K., Lynfield, assignor to J. F. Faxon, Quincy, and J. W. Faxon, Boston, Mass. Sewing-machine .....	Feb. 12, 1878	242		13	279
205, 945	Bradford, Eugene S., Springfield, Ill. Composition for pavements .....	July 16, 1878	547	155	14	87
198, 788	Bradford, Peleg S., Bridgewater, Mass. Metal-rolling machinery .....					
	Bradford, S. Hinckson, New York, N. Y. Combined kindling-wood receptacle and burning-fluid can .....	Jan. 1, 1878	72	19	13	18
208, 065	Same. Tin can .....	Sept. 17, 1878	527	157	14	425
199, 142	Bradley, Byron C., Chicago, Ill. Draft-equalizer .....	Jan. 15, 1878	440	132	13	85
200, 249	Bradley, Byron C., and Charles A. Hague, Chicago, Ill. Sulky-plow .....	Feb. 12, 1878	364	108	13	297
206, 925	Bradley, Carlos D., assignor of one-half interest to Theodore E. Bryant, Macedonia, Iowa. Cultivator .....	Aug. 13, 1878	292	89	14	246
8, 069	Bradley, Christopher C. (See Deering, Michael, assignor.) .....					
199, 780	Bradley, Clara Lynde, San Francisco, Cal. Combination undersuit .....	Feb. 5, 1878	231	71	13	269
	Same. Underwear .....	Jan. 20, 1878	1115	{ 327 328 }	13	206
207, 642	Bradley, Franklin B. (See Delkescamp & Bradley.) .....					
	Bradley, Gilbert W., Sunderland, Vt. Box and fastening .....	Sept. 3, 1878	63	18	14	357
	Bradley & Hubbard Manufacturing Company. (See Everts, John A., assignor.) .....					
	Bradley & Hubbard Manufacturing Company et al. (See Tucker, Hiram, assignor.) .....					
199, 781	Bradley, James, Philadelphia, Pa. Carbureter .....	Jan. 20, 1878	1116	328	13	206
204, 708	Bradley, James J., Newark, N. J. Fire and district alarm telegraph box .....	June 11, 1878	293	91	13	1057
207, 796	Bradley, Milton, Springfield, Mass. Plaiting-machine .....	Sept. 10, 1878	228	71	14	381
198, 869	Brady, Richard Austin, Ottawa, Ontario, Canada. Camp-bedstead .....	Jan. 1, 1878	150	43	13	32
199, 502	Bradley, Samuel, Mauch Chunk, Pa. Ore-jigger .....	Jan. 22, 1878	811	238	13	151



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	Bradley, Voorhees & Day Manufacturing Company (limited). (See Netzer, Louis, assignor.)					
203,905	Bradley, William H., Allegheny, Pa. Wool-washing machine.	May 21, 1878	823	236	13	944
201,896	Bradt, Henry, and Nicholas Van Slyck, Schoenectady, N. Y. Machine for painting broom-handles.	Apr. 2, 1878	8	2, 3	13	600
203,583	Bradt, Henry, assignor of one-half interest to Nicolas Van Slyck, Schoenectady, N. Y. Machine for varnishing broom-handles.	May 14, 1878	283	108	13	881
210,910	Brady, Edwin L., New York, N. Y. Pipe-coupling for railway-car.	Dec. 17, 1878	596	165	14	918
202,143	Brady, Gilbert A., and Francis F. Warner, Chicago, Ill. Type-writing machine.	Apr. 9, 1878	301	89, 90	13	646
200,970	Brady, James. (See Horton & Brady.)					
204,527	Brady, James, Brooklyn, N. Y. Gas-engine.	Mar. 5, 1878	148	48	13	438
209,647	Same. Apparatus for bending tubes.	June 4, 1878	98	33	13	1026
204,127	Same. Machine for measuring and marking fabrics.	Nov. 5, 1878	123	36	14	697
201,644	Brady, James W., Catonsville, Md. Apparatus for raising cream.	May 28, 1878	983	280	13	907
204,191	Brady, John. (See Martin, William J., assignor.)					
201,644	Brady, John, Detroit, Mich. Car-coupling.	Mar. 26, 1878	877	267	13	559
204,191	Brady, John J., Long Island City, N. Y. Step-ladder.	May 28, 1878	1060	301	13	977
201,906	Brady, P. B. (See Robert, Fabian, assignor.)					
209,545	Brady, Patrick, Cambridgeport, Mass. Door-knob and shank attachment.	Apr. 2, 1878	48	13	13	605
201,154	Bragaw, John A., Kingston, N. Y. Tilter for tea-pot.	Nov. 5, 1878	7	3	14	682
198,789	Brain, James, Jersey City, N. Y. Frog.	Mar. 12, 1878	339	104	13	473
202,144	Brainerd, Edwin F. (See Linckel, Frederick, assignor.) (Reissue.)					
202,144	Brainerd, George S., Saint Albans, Vt. Variable exhaust for locomotives.	Jan. 1, 1878	73	19	13	19
202,145	Brainerd, George Segur, Saint Albans, Vt. Variable exhaust for locomotives.	Apr. 9, 1878	303	90	13	646
8,204	Same. Same.	Apr. 9, 1878	304	90	13	646
206,528	Bramble, James, Manayunk, Pa., and Hugh M. Dehl, Fort Wayne, Ind., assignors, by mesne assignments, to Samuel S. White, Philadelphia, Pa. Piano-stool. (Reissue.)	June 25, 1878	1107	328	13	1170
8,080	Bramble, William H., Decatur, Ill. Padlock.	July 30, 1878	1223	352	14	179
8,299	Bramer, Frank, Little Falls, and Orrin W. Badger, Whitney's Point, N. Y.; said Badger assignor to said Bramer. Wheel-harrow. (Reissue.)	Feb. 12, 1878	498	146	13	317
204,783	Bramer, Frank, Little Falls, N. Y. Wheel-harrow. (Reissue.)	June 25, 1878	1114	330	13	1171
205,608	Same. Same.	June 11, 1878	348	115	13	1068
206,218	Same. Same.	July 2, 1878	148	45	14	28
	Same. Same.	July 23, 1878	850	245	14	130
206,663	Branch, Joseph W. (See Mercer, George, assignor.)					
206,926	Same. (See Milligan, John F., assignor.)					
201,090	Brand, Philipp, and Edward J. King, Jacksonville, Ill. Gas-light extinguisher.	Dec. 10, 1878	309	84	14	872
208,363	Brand, Philipp, and Edward Joseph King, Jacksonville, Ill. Gas-light extinguisher.	Aug. 13, 1878	294	90	14	246
201,155	Brandels, Ludwig, Brooklyn, N. Y. Water-trap.	Mar. 12, 1878	273	85	13	404
	Same. Machine for making plates of clay and other plastic material.	Sept. 24, 1878	857	240	14	470
209,969	Brandis, Frederick E., Brooklyn, assignor to Brandis & Teckritz, New York, N. Y. Spindle attachment for surveying-instruments.	Mar. 12, 1878	340		13	473
209,955	Brandis & Teckritz. (See Brandis, Frederick E., assignor.)					
201,322	Brandon, Alexander, New York, N. Y. Elevated railway.	Mar. 5, 1878	146	47, 48	13	438
200,024	Same. Lamp-extinguisher.	Nov. 19, 1878	467	141	14	751
200,787	Brandon, Charles T., Toronto, Ontario, Canada. Painting-machine.	Mar. 19, 1878	532	163	13	507
204,289	Brandt, Alfred, Ebenezer, Austria. Rock-boring machine (hydraulic).	Feb. 5, 1878	128	42	13	253
206,529	Branford Lock Works. (See Coleman, Cornelius C., assignor.)					
200,787	Brankman, August. (See Brightman, Latham, assignor.)					
204,289	Braun, Patrick, Freeport, Ill. Corn-plow.	Feb. 26, 1878	934	275	13	400
206,530	Braun, Joseph, Blooming Prairie, Minn. Draft-equalizer.	May 28, 1878	1153	329	13	989
206,529	Same. Sheaf-dropper for grain-binders.	July 30, 1878	1225	352	14	179
207,158	Brannon, James Casey, assignor of one-half interest to William L. Crippin and Prior W. Hockett, Independence, Kans. Sash-fastener.	July 30, 1878	1224	352	14	179
203,408	Brant, John. (See Empson & Brant.)					
207,000	Brant, John, assignor to Sylvanus M. Lewis, Providence, R. I. Apparatus for the manufacture of seamless balls.	Aug. 20, 1878	530	150	14	280
205,346	Braslin, John, Fair Haven, Conn. Machine for making flower-pots.	May 7, 1878	178	51	13	845
	Braslington, Walter J., Brooklyn, N. Y. Nut-lock.	Aug. 13, 1878	369	113	14	255
207,587	Brault, Agapit, Montreal, Quebec, assignor to Gideon Bourdeau, Laprairie, Canada. Artificial marble.	June 25, 1878	997		13	1156
207,244	Braun, Charles. (See Dickason, Alexander R., assignor.)					
208,788	Braun, Johann C. M., Baraboo, Wis. Bottle-corking machine.	Aug. 20, 1878	623	186	14	291
205,039	Braun, John, Philadelphia, Pa. Lawn-mower.	Oct. 8, 1878	352	102	14	543
207,587	Braun, Louis, Wheeling, W. Va. Toy pistol.	June 18, 1878	661	194	13	1107
210,087	Braunfeld, Henry E., Baltimore, Md. Thill-coupling.	Sept. 3, 1878	3	2	14	349
200,687	Braunhold, Henry, New York, N. Y. Food for horses and cattle.	Nov. 19, 1878	611		14	770
	Brawley, Dewitt C., and William H. H. Morris, Franklin, Pa. Sand-pump reel for deep wells.	Feb. 26, 1878	838	{ 246 } { 247 }	13	385
204,769	Bray, George, Leeds, England. Method of making gas-burners.	June 11, 1878	294	91	13	1057
8,276	Bray, Mellen, Newton, Mass., assignor to Tubular Rivet Company, Conn. Rivet setting machine. (Reissue.)	June 11, 1878	484	140	13	1679
199,503	Bray, Mellen, Newton, Mass. Rivet-setting machine.	Jan. 22, 1878	812	238	13	151
199,504	Same. Japanning.	Jan. 22, 1878	814	238	13	151
203,815	Same. Rivet.	May 21, 1878	634	178	13	919
208,066	Bray, Morris P., assignor of one-half interest to Leopold Kraus, Birmingham, Conn. Corset.	Sept. 17, 1878	527	158	14	425
205,237	Bray, Thomas J., Pittsburg, Pa. Snatch-block.	June 25, 1878	880	260	13	1141
200,501	Bray, Walter, jr., assignor of one-half interest to Phineas S. Hadger, Auburn, N. Y. Buckle.	Feb. 19, 1878	627	184	13	346
203,884	Brayman, La Fayette, Gilbert Station, Ill. Wind-engine.	May 21, 1878	700	200	13	928
205,038	Brayton, Robert, David June, and Oratus S. French, Fremont, Ohio. Process for coating boiler-tubes.	June 18, 1878	660	194	13	1166
208,067	Brazelle, Benjamin, assignor to Brazelle Engine Company, Saint Louis, Mo. Governor for fluid-pressure engines.	Sept. 17, 1878	528	158	14	425
208,149	Same. Governor for steam-engines.	Sept. 17, 1878	614	182	14	436
	Brazelle Engine Company. (See Brazelle, Benjamin, assignor.)					
209,054	Brazier, William S. (See Deava & Brazier.)					
201,501	Brecht, Felix. (See Abell & Brecht.)					
202,239	Brecht, Louis, Baltimore, Md. Ventilating greenhouses.	Nov. 12, 1878	352	105	14	732
202,239	Breckenridge, Orlo, Westfield, Mass. Pipe and rod vise.	Mar. 26, 1878	821	250	13	551
202,092	Breed, Chaney, Farwell, Mich. Sand-band for vehicle-wheels.	May 7, 1878	3	1	13	821
	Breed, De Witt C., Buffalo, N. Y. Compound to increase the combustion of fuel.	Apr. 9, 1878	250		13	639
	Brecher, August. (See Heyl & Brecher.) (Reissue.)					
	Breidbach, Carl. (See Breidbach, Caspar J. and Carl.)					

*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
206, 079	Breidbach, Caspar J. and Carl, New York, N. Y. Varnish .....	July 16, 1878	681	.....	14	104
210, 664	Breinig, David E., Brooklyn, N. Y. Disinfecting-paint .....	Dec. 10, 1878	310	.....	14	873
208, 510	Breisacher, Hieronimus, New York, N. Y. Preparing gray-squirrel skins .....	Oct. 1, 1878	54	17	14	496
201, 907	Breitschwerth, Conrad, Syracuse, and John B. Hughes, Auburn, N. Y. Machine for forming pottery-ware .....	Apr. 2, 1878	48	13	13	606
209, 007	Brekke, Lewis Olson, assignor of one-half interest to William H. Manning, Decorah, Iowa. Draft-equalizer .....	Oct. 15, 1878	607	177	14	581
204, 653	Brennan, Thomas, Louisville, Ky. Corn-sheller .....	June 11, 1878	236	74	13	1049
208, 364	Brenner, Charles, Quincy, Ill. Paving-stone .....	Sept. 24, 1878	857	.....	14	470
202, 514	Brenner, Moses, Baltimore, Md. Sheet-metal can .....	Apr. 16, 1878	693	203	13	705
209, 855	Breon, George. (See Nixon, Francis M., assignor.) .....					
209, 855	Breslau, William, assignor of one-half interest to R. F. Danforth, Baltimore, Md. Vapor-burner .....	Nov. 12, 1878	353	105	14	732
202, 983	Bresnan, Patrick, Astoria, assignor to R. F. Cole & Co., New York, N. Y. Galley .....	Apr. 30, 1878	1232	356	13	783
204, 192	Brett, James, and Bethune Perry, Albion, Cal. Saw-mill head-block .....	May 28, 1878	1060	{ 301 } { 302 }	{ 13 }	977
	Brett, George R., et al. (See Hill, Andrew L., assignor.) .....					
207, 709	Brett, Henry W., Boston, Mass. Wrench .....	Sept. 3, 1878	126	39	14	365
204, 128	Brettell, Ambrose K., Saint Louis, Mo. Ironing apparatus .....	May 28, 1878	984	280	13	968
210, 291	Brettell, Edward W., assignor to Thomas W. Langstroth, Newark, N. J. Latch .....	Nov. 26, 1878	841	248	14	804
	Brewer, Benjamin Barton. (See Cowles & Brewer.) .....					
207, 102	Brewer, John, Brooklyn, N. Y. Pipe-wrench with cutter .....	Aug. 20, 1878	480	144	14	273
208, 287	Brewer, Roland L., assignor to Henry G. Thompson, Milford, Conn. Book-stitching machine .....	Sept. 24, 1878	779	227	14	459
210, 490	Brewer, Russell, New York, N. Y. Car-axle box .....	Dec. 3, 1878	101	26	14	837
8, 040	Brewster, Francis A., Brunswick, Ga., assignor to self and John W. Larabee. Hoop-skirt .....	Jan. 15, 1878	654	191	13	118
210, 447	Brewster, Lewis W., Canton, Ky. Tobacco-hoisting apparatus .....	Dec. 3, 1878	61	15	14	832
199, 024	Brewster, Walter Adriance, Woodbury, N. J. Folding bracket-chair .....	Jan. 8, 1878	313	92	13	64
210, 746	Brewster, William S., Chicago, Ill. Attaching seals to cars .....	Dec. 10, 1878	393	107	14	883
201, 739	Briant, Charles C., Versailles, Ind. Churn .....	Mar. 26, 1878	966	295	13	573
201, 493	Brickley, James Y., Lexington, Ky. Mold for running plaster cornices .....	Mar. 19, 1878	702	214	13	531
199, 180	Bricknall, Augustus Lea, London, England, assignor to George W. Gillett, New York, N. Y. Joining the ends of lead pipes .....	Jan. 15, 1878	485	143	13	92
	Bridgeford & Co. (See Sennett, Abner J., assignor.) .....					
	Bridgeport Brass Company. (See Lincoln, William O., assignor.) .....					
210, 448	Bridges, Daniel, Coquille, Oreg. Dredging and ditching machine .....	Dec. 3, 1878	62	15	14	832
209, 648	Bridgman, Almon, assignor of one-half interest to James L. Perry, Berlin, Wis. Sand-papering-machine .....	Nov. 5, 1878	126	37	14	698
	Briggs, Andrew H. (See Elterich & Briggs.) .....					
203, 531	Briggs, Charles A., Quaker Street, N. Y. Carpet tacker and stretcher .....	May 14, 1878	331	94	13	874
199, 407	Briggs, George G., Chicago, Ill. Stove-polish liquid .....	Jan. 22, 1878	720	.....	13	136
210, 292	Briggs, Henrik Parsons, North Adams, Mass. Loom-shuttle .....	Nov. 26, 1878	842	.....	14	804
210, 911	Briggs, Isaac, Middleborough, Mass. Nail-plate feeder .....	Dec. 17, 1878	596	165	14	918
201, 494	Briggs, Johnson, Montreal, Canada. Cooking and heating range .....	Mar. 19, 1878	703	214	13	531
210, 593	Briggs, Joshua, Peterborough, N. H. Piano-stool .....	Dec. 10, 1878	233	63	14	863
	Briggs, Julius L. (See Rosser & Briggs.) .....					
206, 533	Briggs, Leonard C., Boston, Mass. Watch-regulator .....	July 30, 1878	1227	353	14	180
199, 686	Briggs, Orlando P., assignor to Henry F. Oliver, Chicago, Ill. Bolt-threading machine .....	Jan. 29, 1878	1030	300	13	192
	Briggs, R. F. (See Brown, Jacob L., assignor.) .....					
202, 984	Briggs, Richard Henry, and James Henry Dougherty, Whistler, Ala. Machine for making freight-car truck-sides .....	Apr. 30, 1878	1233	356	13	783
198, 790	Briggs, Thomas, Lynn, Mass. Trimming mechanism for sewing-machines .....	Jan. 1, 1878	74	19	13	19
206, 219	Briggs, William Henry, Lemars, Iowa. Horse-collar .....	July 23, 1878	860	246	14	130
	Brigham, Charles, et al. (See Bacon, Charles H., assignor.) .....					
208, 511	Brigham, Dan, and David E. Shaw, Chatsworth, Ill. Feed-grinding mill .....	Oct. 1, 1878	55	17	14	497
209, 450	Brigham, Francis and Wilbur F., and S. Myron Hewitt, Hudson, and William F. Prusha, Marlborough, Mass. Water-proof cloth .....	Oct. 29, 1878	1096	.....	14	657
208, 885	Brigham, Jonathan W., and Theodore M. Fleniken, Rockford, Ill. Corn-planter .....	Oct. 15, 1878	471	136	14	563
	Brigham, Wilbur F. (See Brigham, Hewitt & Prusha.) .....					
	Same. (See Howes, Carson F., assignor.) .....					
	Brigham, Wilbur F., et al. (See Trowbridge, William F., assignor.) .....					
	Same. (See Watkins, Henry J., assignor.) .....					
206, 659	Brigham, William E. (See Payson, Calvin B., assignor.) .....	Aug. 6, 1878	2	1	14	207
200, 688	Bright, Charles M., Waukegan, Wis. Label-holder .....	Feb. 26, 1878	839	247	13	385
	Bright, Hiram. (See Josel, Francis E., assignor.) .....					
	Same. (See Snow, Charles P., assignor.) .....					
209, 325	Bright, James, New York, N. Y., assignor of one-half interest to William Bentley, Newark, N. J. Bracket .....	Oct. 29, 1878	966	282	14	638
202, 628	Bright, Richard A., jr., Providence, R. I. Cigar-machine .....	Apr. 23, 1878	849	244	13	732
199, 348	Bright, William Leatham, George Ingham, and Jacob Fielding, Rochdale, England. Winding and reeling cotton, silk, worsted, &c .....	Jan. 22, 1878	660	193	13	127
210, 491	Brightman, Benjamin F., Bristol, Me. Paddle for drier .....	Dec. 3, 1878	102	26	14	837
202, 698	Brightman, Joseph W., Cleveland, Ohio. Pulp-grinding machine .....	Apr. 23, 1878	926	{ 264 } { 265 }	{ 13 }	740
200, 251	Brightman, Latham, assignor of one-half interest to August Brankman, Cleveland, Ohio. Machine for drawing and straightening metal bars .....	Feb. 12, 1878	366	108	13	297
210, 088	Brightman, Latham, assignor to Cleveland Rolling Mill Company, Cleveland, Ohio. Machine for making metallic spools .....	Nov. 19, 1878	611	182	14	770
	Brill, George M. (See Brill, John, George, and George M.) .....					
202, 922	Brill, George M., Philadelphia, Pa. Car-truck .....	Apr. 30, 1878	1174	338	13	775
202, 920	Brill, John George and George M., Philadelphia, Pa. Car-shutter .....	Apr. 30, 1878	1172	338	13	775
202, 921	Same. Car-door .....	Apr. 30, 1878	1173	338	13	775
	Brimmer, Henry J. (See Salisbury, Wilber S., assignor.) .....					
199, 408	Brinckmann, John F., Cincinnati, Ohio. Screw-cutting-die holder .....	Jan. 22, 1878	721	212	13	136
202, 405	Brines, William H., assignor of two-thirds interest to Brown & Owen, Philadelphia, Pa. Metallic railing .....	Apr. 16, 1878	590	173	13	690
201, 386	Briney, Reuben, Kittanning, Pa. Sucker-rod socket or drill-grab .....	Mar. 19, 1878	597	183	13	516
	Bringham, W. B., et al. (See Prusha, William F., assignor.) .....					
	Brinkerhoff, Jacob. (See Judson, Lyman P., assignor.) .....					
	Brinkman, Andrew. (See Rawlings, William Joshua, assignor.) .....					
	Brinkman, Frank. (See Rawlings, William Joshua, assignor.) .....					
	Brinkmeyer, Frederick W., et al. (See Smith, Mark A., assignor.) .....					
	Brinsmade, D. S. (See Stever, Jeremiah, assignor.) .....					



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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
199, 687	Brinsmead, John, assignor to John Brinsmead & Sons, London, Great Britain. Piano-forte action	Jan. 29, 1878	1033	{ 300 301 }	13	193
201, 221	Brinsmead & Sons, John. (See Brinsmead, John, assignor.)					
201, 221	Brintnall, Thomas M., Medina, Ohio. Lamp-burner	Mar. 12, 1878	402	124	13	482
204, 710	Briody, Bernard. (See Briody, James, assignor.)					
204, 710	Briody, James, assignor of one-fourth interest to Bernard Briody, Detroit, Mich. Rail-way-switch	June 11, 1878	295	92	13	1057
205, 471	Brisac, Solomon, and William Barbe, New York, N. Y. Fender for street-cars	July 2, 1878	8	3	14	10
205, 040	Briscoe, John, Petrolia, Pa. Torpedo for oil-wells	June 18, 1878	661	104	13	1107
200, 166	Bristol, Charles B., assignor to W. & E. T. Fitch, New Haven, Conn. Harness-terret.	Feb. 12, 1878	286	85	13	285
201, 989	Same. Harness-loop	Apr. 2, 1878	127	37	13	617
203, 288	Same. Hame-connection	Sept. 24, 1878	780	227	14	460
203, 584	Bristol, Lambert J., New Haven, Conn. Snap-hook	May 14, 1878	384	109	13	881
200, 250	Britt, Benjamin. (See Britt, Stephen, assignor.)					
200, 250	Britt, Stephen, assignor to Benjamin Britt, Brooklyn, N. Y. Platen for oil-presses	Feb. 12, 1878	365	108	13	297
203, 531	Britt, Stephen, Brooklyn, N. Y. Post-socket	July 30, 1878	1226	353	14	180
209, 377	Britt, Will J., assignor of one-half interest to James M. Chambers, Saint Louis, Mo. Exercising-machine	Oct. 29, 1878	1023	297	14	646
210, 401	Brittain, Charles Thomas, Butler, Pa. Sash-balance	Dec. 3, 1878	10	3	14	826
207, 245	Britton, Benjamin F., New York, N. Y. Bearing and support for elevated railways, &c.	Aug. 20, 1878	624	187	14	201
199, 505	Britton, Rodney G., Springfield, Vt. Child's carriage	Jan. 22, 1878	817	239	13	152
205, 995	Brisce, John, Alvarado, Cal. Window-screen	July 16, 1878	601	173	14	94
204, 528	Broad, Charles H., Rochester, assignor to Charles T. Alverson, Pittsford, N. Y. Water-proof blacking	June 4, 1878	99		13	1026
205, 523	Broad, Elisha, Minneapolis, Minn. Cant-dog	July 2, 1878	62	18	14	17
203, 111	Broadbooks, Peter, Batavia, N. Y. Mechanical movement	Apr. 30, 1878	1352	393	13	799
203, 112	Same. same	Apr. 30, 1878	1353	394	13	799
205, 524	Brocius, Harman, Hiram Elijah Bensinger, and Samuel Wragg, Raven Run, Pa. Lubricator	July 2, 1878	63	18	14	17
199, 782	Brook, Alvan D., Gruntville, Mass. Water-tube steam-generator	Jan. 29, 1878	1118	{ 328 329 }	13	206
	Brook, John W. (See Adams, John Q., assignor.)					
	Brook, Matthias. (See Copeland, Woodward & Brook) (Reissue.)					
206, 534	Same. same					
206, 534	Brook, William E., New York, assignor of one-half interest to Jane Thompson, Brooklyn, N. Y. Manufacture of compound lumber	July 30, 1878	1228	353	14	180
209, 221	Brook, William E., New York, N. Y. Wash-board	Oct. 22, 1878	855	248	14	619
203, 816	Brook, William H., assignor to A. J. Pouch, Brooklyn, and J. A. Bostwick, New York, N. Y. Man-hole cover for petroleum-tanks	May 21, 1878	635	179	13	910
203, 817	Same. Man-hole cover for oil-tanks	May 21, 1878	636	179	13	920
204, 477	Brook, William H., Brooklyn, N. Y. Machine for filling cans, &c., with liquids	June 4, 1878	58	20	13	1021
201, 908	Brockett, Atwater E., Branford, assignor to H. L. Harrison, Guilford, Conn. Combined auger and reamer	Apr. 2, 1878	50	13	13	606
206, 927	Brockhausen, Otto Frederick, Reno, Nev. Blasting-wedge	Aug. 13, 1878	295	90	14	246
207, 847	Brockman, John H., Cincinnati, Ohio. Rectifying apparatus	Sept. 10, 1878	280	86	14	358
205, 041	Brocksteper, Frederick W., assignor to Sargent & Co., New Haven, Conn. Latch	June 18, 1878	662	195	13	1107
208, 289	Same. Door-bell	Sept. 24, 1878	780	228	14	460
205, 722	Brodie, William, and Ezra Comfort, Philadelphia, Pa. Bracket	July 9, 1878	294	86	14	49
210, 493	Broja, Richard, Zabrze, Silesia, Prussia. Traction-engine	Dec. 3, 1878	102	27	14	837
206, 080	Brokaw, John N., Ovid, Mich. Gate	July 16, 1878	682	197	14	104
206, 081	Brokhahne, Alfred V., New York, N. Y. Razor-strop	July 16, 1878	682	197	14	104
208, 365	Same. same	Sept. 24, 1878	858	250	14	470
208, 670	Same. same	Oct. 8, 1878	229	66	14	527
209, 107	Same. same	Oct. 22, 1878	737	214	14	604
209, 108	Same. same	Oct. 22, 1878	738	214	14	604
206, 082	Same. Razor-strop case	July 16, 1878	683	198	14	104
200, 689	Brombacher, Charles, Tarrytown, N. Y. Sheet-metal-bending machine	Feb. 26, 1878	840	247	13	385
204, 711	Bronson, Adelbert E. (See Roehl, Carl, assignor.)					
210, 293	Bronson, Erskine H., Ottawa, Ontario, Canada. Railway-switch	June 11, 1878	298	92	13	1058
205, 609	Bronson, Erskine Henry, Ottawa, Ontario, Canada. Railway-switch	Nov. 28, 1878	843	248	14	804
210, 747	Bronson, George H., Brooklyn, N. Y. Chicken-coop	July 2, 1878	150	45	14	28
204, 419	Bronson, Levi, assignor of one-half interest to Pitts Agricultural Works, Buffalo, N. Y. Thrashing-machine	Dec. 10, 1878	394	{ 107 108 }	14	883
205, 042	Brooke, William E., Trenton, N. J. Riveting-machine for tubing	June 4, 1878	6	2	13	1013
205, 997	Same. Saw-teeth	June 18, 1878	663	195	13	1107
200, 973	Same. Punching-press	July 16, 1878	602	{ 173 174 }	14	94
204, 880	Brookfield, James M., Brooklyn, N. Y. Glass-furnace	Mar. 5, 1878	150	49	13	439
208, 366	Brooks, Albert A., and Heman D. Crooker, Battle Creek, Mich. Atmospheric clothes-washer	June 18, 1878	504	147	13	1086
202, 923	Brooks, Asa, Hawleyton, N. Y. Machine for calcimining	Sept. 24, 1878	850	250	14	470
199, 506	Brooks, Byron A., New York, N. Y. Type-writing machine	Apr. 30, 1878	1175	{ 338 339 }	13	775
210, 986	Brooks & Co., Clarence. (See Griffin, Thomas J., assignor.)					
200, 124	Brooks, David, assignor to Brooks Underground Telegraph Construction Company (limited), Philadelphia, Pa. Insulating underground telegraph-wires	Jan. 22, 1878	818	239	13	152
210, 987	Same. Insulating telegraph-conductor	Dec. 17, 1878	680	187	14	928
203, 996	Brooks, David, Philadelphia, Pa. Telegraph-insulator	Feb. 12, 1878	243	74	13	279
208, 953	Same. Insulating induction-coil	Dec. 17, 1878	681	188	14	928
209, 008	Brooks, Edward J., New York, N. Y. Seal-lock	May 21, 1878	824	236	13	944
	Same. Baggage-seal	Oct. 15, 1878	552	161	14	574
	Same. Metallic seal	Oct. 15, 1878	607	177	14	581
202, 515	Brooks, E. J. (See Brooks, Franklin W., assignor.)					
203, 409	Brooks, Franklin W., assignor to E. J. Brooks, New York, N. Y. Blank for bank-checks	Apr. 16, 1878	604	{ 203 204 }	13	705
210, 089	Brooks, Franklin W., New York, N. Y. Postal card	May 7, 1878	179	52	13	845
207, 007	Same. Bank-check, draft, &c.	Nov. 19, 1878	613	182	14	770
	Brooks, George D., assignor, by mesne assignment, to Robert T. Smith and William A. Wicks, Baltimore, Md. Sheet-metal can	Aug. 13, 1878	369	113	14	255
203, 238	Brooks, Hiram W. (See Porter, Stephen, assignor.)					
205, 831	Brooks, Hiram W., et al. (See Schouls, John R., assignor.)					
198, 927	Brooks, James M. (See Brooks, Rhodom M. and James M.)					
	Brooks, John S., Brooklyn, N. Y. Sheet-metal tubing	June 25, 1878	882	261	13	1141
	Brooks, Luman F., assignor to Orris J. Richardson, Lebanon, N. H. Mop-head	July 9, 1878	414	117	14	65
	Brooks, Myron D., Boston, Mass. Portable hammock attachment for car-seats	Jan. 8, 1878	219	62	13	49

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
206, 532	Brooks, Rhodom M. and James M., Jenkinsville, Ga. Sirup evaporator and skimmer ..	July 30, 1878	1226	353	14	180
	Brooks, S. B. (See Share, Loring G., assignor.)					
204, 290	Brooks, Sidney R., East Marion, N. Y. Clew-line leader ..	May 28, 1878	1154	330	13	989
	Brooks, Silas N., administrator. (See Yale, Linus, jr.) ..					
	Brooks Underground Telegraph Construction Company (limited). (See Brooks, David, assignor.)					
200, 892	Brooks, William, assignor to J. W. Lamb, Otsego, N. Y. Hop-picking box ..	Mar. 5, 1878	75	26	13	427
198, 870	Brooks, William F., New York, N. Y. Car-axle ..	Jan. 1, 1878	150	43	13	52
206, 220	Broome, John S., and Charles S. Archer, Camden, N. J. Railway-switch ..	July 23, 1878	860	246	14	130
204, 291	Brosemann, Ernst, New York, N. Y., Moritz Rosenstock, Hoboken, N. J., and Martin Russenberger, New York, N. Y. Shuttle-driving mechanism for sewing-machines ..	May 28, 1878	1155	330	13	989
209, 451	Brosius, Aaron, Fort Wayne, Ind. Endless-track wheel for vehicles ..	Oct. 29, 1878	1097	319	14	657
210, 002	Brotherhood, Fred, Charleston, S. C. Rice pounding and hulling mill ..	Nov. 19, 1878	521	157	14	738
207, 710	Brotherton, Jacob, Ames, Iowa, assignor to A. Dillman, Joliet, Ill. Barbed wire for fences ..	Sept. 3, 1878	127	39	14	305
	Brotherton, James. (See Lamson & Brotherton.)					
206, 221	Brothers, Oliver, jr., assignor to self and Henry D. Dunbar, North Hartland, Vt. Hold-back for vehicles ..	July 23, 1878	862	246	14	130
206, 222	Same.....Horse-detacher ..	July 23, 1878	863	246	14	130
203, 946	Brougham, George, Chicago, Ill. Meat-can ..	July 16, 1878	547	155	14	87
203, 240	Broughton, James, Hope Valley, R. I. Fire-escape ..	May 7, 1878	4	2	13	821
204, 794	Broughton, John, Brooklyn, assignor to William J. Griffiths, Green Point, N. Y. Sash-fastener ..	June 11, 1878	390	116	13	1068
209, 009	Broughton, John, assignor to William Vogel, Brooklyn, N. Y. Metallic can ..	Oct. 15, 1878	609	177	14	581
203, 317	Broussard, Camille E., et al. (See Howard, William Henry, assignor.)					
8, 277	Browell, Jeremiah, San Francisco, Cal. Heating and ventilating chimneys ..	May 7, 1878	88	26	13	832
	Brower, Bloomfield, New York, and John F. Adams, Irvington, N. Y.; said Adams assignor to said Brower. Temporary binder ..	June 11, 1878	486	141	13	1079
205, 239	Brower, Emmett H., Carson City, Mich. Carpenter's vise ..	June 25, 1878	882	261	13	1141
	Brown, Ada. (See Speers, Noah W., assignor.)					
206, 767	Brown, Adna, Springfield, Vt. Cloth-finishing machine ..	Aug. 6, 1878	110	35	14	220
206, 770	Brown, Alanson, Rochester, N. Y. Bosom-board ..	Aug. 6, 1878	116	36	14	221
208, 222	Brown, Alexander E., Cleveland, Ohio. Truck apparatus for lifting and conveying ingots, pots, &c ..	Sept. 24, 1878	705	208	14	451
	Brown, A. L., et al. (See Barker, Joseph, assignor.) ..					
209, 378	Brown, Alvin M., assignor to self and Daniel S. King, Nettleton, Me. Self-feeding water-trough ..	Oct. 29, 1878	1024	297	14	646
	Brown, Benjamin F. (See Meech, Harrison B., assignor.) ..					
205, 347	Brown, Benjamin F., Tilton, N. H. Reducing wood to pulp for paper ..	June 25, 1878	998	295	13	1156
206, 769	Brown, Bonnell & Co. (See Hamilton, Homer, assignor.)					
	Brown, Burlington D., and Joseph F. Paden, Shamrock, Mo. Car-coupling ..	Aug. 6, 1878	115	36	14	221
202, 222	Brown, Charles. (See Kamp & Brown.)					
	Brown, Charles, Winterthur, Switzerland. Valve-gear for engines ..	Apr. 9, 1878	388	113	13	658
201, 646	Brown, Charles F. (See Swift, William H., assignor.)					
	Brown, Charles M., Chicago, Ill. Ore crusher and grinder ..	Mar. 26, 1878	879	267	13	560
208, 367	Brown, Charles Warren. (See Dodge & Brown.)					
205, 044	Brown, C. Warren, Salem, Mass. Carriage-boot ..	Sept. 24, 1878	860	250	14	470
204, 881	Brown, Colin, Glasgow, North Britain. Key-board for musical instruments ..	June 18, 1878	665	195	13	1107
203, 701	Brown, Darius C., Lowell, Mass. Sew-heddle eye or hook for heddle-frames ..	June 18, 1878	505	147	13	1086
	Brown, David F., sr., assignor of one-half interest to Perry Engle, Newton, Iowa. Combined vise, wrench, and pincher ..	May 14, 1878	501	142	13	895
204, 531	Brown, David F., assignor of one-half interest to Richard Lamb, Newton, Iowa. Potato-harvester ..	June 4, 1878	102	34, 35	13	1027
	Brown, D. S. (See Lyon, John C., assignor.)					
208, 712	Brown, Eben, Milford, Mass. Machine for turning needle-blanks ..	Oct. 8, 1878	274	78	14	533
207, 161	Brown, Elijah. (See Miller, Talmadge & Brown.)					
202, 924	Brown, Emerson, Sterling, Mass. Household utensil ..	Aug. 20, 1878	533	160	14	280
203, 113	Brown, F. Barton, Boston, Mass. Clasp ..	Apr. 30, 1878	1177	339	13	776
206, 388	Same.....Corset-fastening ..	Apr. 30, 1878	1354	394	13	799
210, 665	Same.....Clasp ..	July 30, 1878	1076	307	14	161
210, 666	Same.....same ..	Dec. 10, 1878	311	85	14	873
206, 223	Same.....Stocking-supporter ..	Dec. 10, 1878	312	85	14	873
206, 417	Brown, Francis Randolph, Denver, Colo. Ore-crushing machine ..	July 23, 1878	864	247	14	130
206, 418	Same.....Ore-separator ..	July 30, 1878	1107	316	14	165
	Same.....Ore-jigger ..	July 30, 1878	1108	316, 317	14	165
202, 785	Brown, Frederick A. (See Hanks, William R., assignor.)					
	Brown, Freeman, Haverhill, Mass. Valve ..	Apr. 23, 1878	1013	291	13	751
201, 740	Brown, George. (See Perkins & Brown.)					
198, 760	Brown, George, Washington, Pa. Adjustable float for paddle-wheels ..	Mar. 26, 1878	966	295	13	573
203, 997	Brown, George W., Galesburg, Ill. Corn-planter ..	Jan. 1, 1878	36	9	13	13
	Same.....same ..	May 21, 1878	826	236, 237	13	944
208, 058	Brown, George Warren, Cumberland Mills (Westbrook), Me. Razor-strop ..	Sept. 17, 1878	530	138	14	425
202, 699	Brown, Henry, Decatur, Mich. Fruit-drier ..	Apr. 23, 1878	927	265	13	740
209, 605	Brown, Henry, Silver Lake, Ind. Churn ..	Nov. 5, 1878	73	21	14	690
	Brown, Hinman & Co. (See Winterbotham, Robert, assignor.)					
	Brown, Hiram M. (See McGill, William C., assignor.)					
	Brown, Isabella S. (See Brown, William H., assignor.)					
201, 592	Brown, J. L. (See Bennett, William J., assignor.)					
	Brown, Jacob L., assignor to R. F. Briggs, Amesbury, Mass. Spoke-dressing machine ..	Mar. 26, 1878	822	250, 251	13	552
210, 912	Brown, James, assignor to W. C. Vosburgh & Co., Brooklyn, N. Y. Drop-light ..	Dec. 17, 1878	598	165	14	918
204, 947	Brown, James Benjamin, Suisun City, Cal. Book-holder ..	June 18, 1878	573	167	13	1095
209, 749	Brown, James B., Washington, D. C. Bag-holder ..	Nov. 12, 1878	243	72	14	717
	Brown, James Hull. (See Arnsworth & Brown.)					
	Brown, James O. (See Chase, Lorenzo, assignor.)					
203, 532	Brown, James W. (See Allan & Brown.)					
	Brown, Japhier S., West Jefferson, Ohio. Clothes-pounder ..	May 14, 1878	332	94	13	874
	Brown, Jefferson, jr., et al. (See Thompson, Samuel R., assignor.) ..					
207, 160	Brown, John Anderson, Tyler, Tex. Damping-roller ..	Aug. 20, 1878	532	160	14	280
209, 167	Brown, John E., Lausburg, N. Y. Car brake and starter ..	Feb. 12, 1878	286	85	13	285
205, 043	Brown, John F., Indianapolis, Ind. Rotary steam-engine ..	June 18, 1878	664	195	13	1107
202, 146	Brown, John S., Fisherville, N. H., and Lewis Kimball, jr., East Richford, Vt. Wooden-tray machine ..	Apr. 9, 1878	305	90, 91	13	647

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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205, 832	Brown, John S., Washington, D. C. Border-tile.	July 9, 1878	414	118	14	65
203, 318	Brown, Jonathan, assignor to Daniel Stewart, Elgin County, Canada. Threshing-machine.	May 7, 1878	90	26	13	832
204, 530	Brown, Joseph W., Lockland, Ohio. Carriage-dash feet.	June 4, 1878	101	34	13	1027
204, 795	Brown, Joseph, London, England. Composition for supporting metallic plates for the formation of printing-surfaces.	June 11, 1878	391	.....	13	1068
203, 585	Brown, Levi, Angola, N. Y. Harrow.	May 14, 1878	385	109	13	881
210, 493	Brown, Lewis E., Cincinnati, Ohio. Spring weighing-scale.	Dec. 3, 1878	105	27	14	837
201, 323	Brown, L. J. (See Terry, Sidney C., assignor.)					
201, 323	Brown, Lorenzo D., assignor of one-half interest to W. S. Haggard, La Fayette, Ind. Wagon-tongue support.	Mar. 19, 1878	533	164	13	507
208, 457	Brown, Luther, Bloomfield, Iowa. Car-coupling.	Oct. 1, 1878	3	1	14	480
209, 452	Brown, Malachi, assignor of five-ninths interest to William Q. Atwood, East Saginaw, Mich. Machine for cutting blanks for stove-pipe elbows.	Oct. 29, 1878	1098	319	14	657
202, 784	Brown, Nathan H., Detroit, Mich. Roof-battening.	Apr. 23, 1878	1013	290	13	751
205, 045	Brown, Nathaniel B., Antwerp, N. Y. Churn.	June 18, 1878	668	196	13	1107
	Brown, Nelson H. (See Van Hoesen & Brown). (Reissue.)					
	Brown & Owen. (See Brines, William H., assignor.)					
199, 783	Brown, Robert, and William Houston, Dayton, Ohio. Corn-planter.	Jan. 29, 1878	1121	329	13	207
202, 783	Brown, Robert Allen, Burke Centre, N. Y. Tread-mill.	Apr. 23, 1878	1012	290	13	751
203, 588	Brown, Robert Charles, Portland, Oreg. Construction of hulls for steam-vessels.	May 14, 1878	386	109	13	881
209, 546	Same. Car-axle box.	Nov. 5, 1878	8	3	14	683
207, 848	Brown, Rufus G., Pittston, Me. Ice-elevator.	Sept. 10, 1878	281	87	14	388
210, 090	Brown, Samuel McCorcel, Carthage, Mo. Churn.	Nov. 19, 1878	614	182	14	770
	Brown, Stephen. (See Goldsmith, Cruickshank & Brown.)					
209, 856	Brown, Thomas, Forst Lake, assignor of one-half interest to M. B. Wright, Susquehanna Depot, Pa. Vehicle-wheel.	Nov. 12, 1878	354	106	14	732
	Brown, Thomas Benton. (See Wickersham & Brown.)					
202, 925	Brown, Thomas H., et al. (See Barker, Joseph, assignor). (Reissue.)					
209, 109	Brown, Thomas H., Chicago, Ill. Cushion for sulkies.	Apr. 30, 1878	1177	339	13	776
201, 645	Same. Sulky.	Oct. 22, 1878	739	214	14	604
206, 857	Brown, Thomas J., Fairfield, Tex. Horse-hoe and cultivator.	Mar. 26, 1878	878	267	13	559
	Brown, Thomas S., assignor of one-half interest to John P. Adriaance, Poughkeepsie, N. Y. Harvester.	Aug. 13, 1878	219	70, 71	14	238
204, 529	Brown, William, et al. (See Ramage, Alexander, assignor.)					
208, 368	Brown, William, Saint Louis, Mo. Stave-jointing machine.	June 4, 1878	100	34	13	1026
	Brown, William, Jersey City, N. J., assignor of one-half interest to Frederick Roberts, New York, N. Y. Metallic packing for stuffing-boxes.	Sept. 24, 1878	861	250	14	470
	Brown, William C. (See Comly & Brown.)					
205, 996	Brown, William D., Indianapolis, Ind., assignor to Chambers, Bering & Quinlan, Decatur, Ill. Ring-blank for swine.	July 16, 1878	601	173	14	94
200, 419	Brown, William D., Indianapolis, Ind., assignor to William B. Chambers, J. Ed. Bering, and William J. Quinlan, Decatur, Ill. Instrument for ringing swine.	July 30, 1878	1110	317	14	165
	Brown, William H. (See Blake, William S., assignor.)					
199, 257	Brown, William H., assignor to Isabella S. Brown, Indianapolis, Ind. Steam-radiator.	Jan. 15, 1878	556	163	13	103
200, 601	Same. same.	Feb. 26, 1878	746	219	13	371
201, 091	Same. same.	Mar. 12, 1878	274	85	13	464
209, 049	Brown, William H., Waterbury, Conn., and Isaac Osgood, Utica, N. Y. Handle for table-knives.	Nov. 5, 1878	127	37	14	698
208, 789	Brown, William J., jr., Philadelphia, Pa. Machine for inserting and clinching wire-staples.	Oct. 8, 1878	354	102	14	543
210, 748	Same. Device for holding metallic staples.	Dec. 10, 1878	396	108	14	883
199, 025	Brown, William P., Zanesville, Ohio. Cultivator tongue.	Jan. 8, 1878	313	92	13	64
	Brown, William W. (See Titus, George M., assignor.)					
190, 616	Browne, George, assignor of one-half interest to Thomas T. Turnbull, Montreal, Quebec, Canada. Metal can.	Jan. 29, 1878	962	279	13	182
	Browne, W. T., et al. (See Vincent, George, assignor.)					
208, 710	Browne, William Frank, assignor to Hydrocarbon Steam Generating Company, New York, N. Y. Gas-retort.	Oct. 8, 1878	271	77	14	503
208, 711	Same. Steam-generator.	Oct. 8, 1878	273	78	14	37
208, 790	Same. same.	Oct. 8, 1878	355	{ 102 } { 103 }	14	544
210, 494	Same. Steam-generating apparatus.	Dec. 3, 1878	105	28	14	838
207, 588	Brownell, Andrew S., Watertown, Mass. Apparatus for heating railway-cars.	Sept. 3, 1878	4	2	14	39
202, 406	Brownell, George Loomis, East Haddam, Conn. Machine for making cordage.	Apr. 16, 1878	501	174	13	610
206, 430	Brownell, William H., Brooklyn, N. Y. Apparatus for demonstrating military tactics.	July 30, 1878	1110	317	14	165
206, 525	Brownson, William H., Saint Paul, Minn. Horse-collar.	July 30, 1878	1230	354	14	1140
209, 795	Brua, Samuel M., Harrisburg, Pa. Process of manufacturing flour.	Nov. 12, 1878	290	87	14	724
190, 507	Brubaker, Andrew, assignor of one-half interest to L. Jeff Sprengle, Ashland, Ohio. Bag-holder.	Jan. 22, 1878	819	239	13	112
199, 668	Brubaker, Daniel, Mansfield, Ohio. Mill-stone exhaust.	Jan. 29, 1878	1034	301	13	193
205, 833	Bruee, Jerome D., Newberry, S. C. Bale-tie.	July 9, 1878	416	118	14	65
209, 796	Bruce, Joseph A., Brooklyn, N. Y. Letter and number for signs.	Nov. 12, 1878	291	87	14	714
210, 988	Brückner, Carl, assignor to J. A. Fay & Co., Cincinnati, Ohio. Sandpapering-machine.	Dec. 17, 1878	682	188	14	328
	Brueck, G. (See Brueck, Otto, assignor). (Reissue.)					
8, 207	Brueck, Otto, Union Hill, N. J., assignor to G. Brueck, New York, N. Y. Fan.	Apr. 30, 1878	1491	436	15	816
208, 458	Bruen, John T., Brooklyn, N. Y. Machinery for opening and pressing seams.	Oct. 1, 1878	4	1, 2	14	49
207, 849	Brug, George A., Providence, R. I. Atomizer.	Sept. 10, 1878	263	87	14	388
199, 784	Brumbaugh, Samuel A., assignor to self and George J. Bolton, Harrisburg, Pa. Coupling for soft-metal pipes and hose.	Jan. 29, 1878	1123	329	13	207
198, 966	Bruner, John Andrew, and Alexander Rich, Stockton, Cal. Combined elevator, track, and self-discharging bucket.	Jan. 8, 1878	257	73	13	55
209, 743	Brunner, Burroughs P., San Francisco, Cal. Roll for reducing old iron railway-rails.	Nov. 5, 1878	227	68	14	711
200, 125	Brunner, Charles, Peru, and Hiram Reynolds, La Salle, Ill. Barb for fence-wires.	Feb. 12, 1878	244	74	13	279
190, 026	Brunner, Christian and John George, Newton, Iowa. Fire-escape.	Jan. 8, 1878	315	93	13	65
	Brunner, David F. (See Smith, John F. S., assignor.)					
	Brunner, John George. (See Brunner, Christian and John George.)					
205, 240	Brunner, Julius, Morrisania, N. Y. Toy pistol.	June 23, 1878	883	261	13	1141
203, 410	Brunor, John J., Washington, D. C. Book.	May 7, 1878	181	52	13	845
202, 407	Brunson, Sterne, Benton Harbor, assignor of one-half interest to Julius O. Antisdale, Muskegon County, Mich. Nut-lock.	Apr. 16, 1878	592	174	13	690
203, 411	Brush, Charles F., Cleveland, Ohio. Electric lamp.	May 7, 1878	181	52, 53	13	845
203, 412	Same. Magneto-electric machine.	May 7, 1878	184	53	13	845
203, 413	Same. Armature for dynamo-electric machines.	May 7, 1878	185	54	13	846

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205, 173	Brush, M. Wagner, Cambridge, and James J. Hartnett, Boston, assignors to Arthur C. Gould, Brookline, Mass. Spool-printing machine.	June 25, 1878	810	241	13	1131
208, 369	Brush, William Edgar, New York, N. Y. Ash-sifter.	Sept. 24, 1878	861	251	14	470
206, 224	Brustman, Charles, Fremont, N. Y. Straw-cutter.	July 23, 1878	865	247	14	130
8, 492	Bryan, Clark W., assignor, by mesne assignments, to Clark W. Bryan and Jesse F. Tapley, Springfield, Mass. Calendar (Reissue.)	Nov. 19, 1878	705	210	14	783
201, 953	Bryan, John, Canton, Ill. Syrup-gage.	Mar. 26, 1878	824	251	13	552
209, 857	Same. Bottle-stopper fastener.	Nov. 12, 1878	355	106	14	732
205, 723	Bryan, John C., Titusville, Pa. Balanced slide-valve.	July 9, 1878	295	87	14	50
205, 047	Bryan, Samuel, Twin Grove, Wis. Portable fence.	June 18, 1878	670	196	13	1108
209, 453	Bryant, Clark B., and Augustus D. Hendrick, assignors to New Haven Clock Company, New Haven, Conn. Calendar-clock.	Oct. 29, 1878	1099	320	14	657
203, 587	Bryant, Francis G., Seattle, Wash. Fire-escape.	May 14, 1878	387	109	13	881
207, 942	Bryant, James, Towanda, Pa. Platform-gear for vehicles.	Sept. 10, 1878	388	117	14	401
205, 046	Bryant, Robert Cary, Salem, Ind. Automatic fan.	June 18, 1878	669	196	13	1107
207, 008	Bryant, Samuel R., Waterford, Pa. Milk-cooler.	Aug. 13, 1878	370	113	14	255
	Bryant, Theodore E. (See Bradley, Carlos D., assignor.)					
	Bryant, Velorus A. (See Seamus, Bryant & Devling.)					
	Bryant, William, executor. (See Tift & Love) (Reissue.)					
202, 223	Bryant, William A., Notasulga, Ala. Apparatus for detaching horses from vehicles.	Apr. 9, 1878	389	113	13	658
206, 858	Bryden, George, Hartford, Conn. Manufacture of horseshoes.	Aug. 13, 1878	223	71	14	238
205, 859	Same. Die for making horseshoes.	Aug. 13, 1878	223	72	14	238
205, 998	Bryer, Samuel G., Saugus, assignor to self and Joseph A. Newhall, East Saugus, Mass. Steam drilling-machine.	July 16, 1878	603	174	14	94
207, 162	Bryer, Samuel G., Saugus, Mass. Rock-drilling machine.	Aug. 20, 1878	534	160	14	280
208, 954	Bryon, William J. O., New York, N. Y. Exercising-machine.	Oct. 15, 1878	553	161	14	574
				162		
200, 025	Bryson, Charles M., Cleveland, Ohio. Bed-clothes clamp.	Feb. 5, 1878	130	42	13	254
207, 490	Buchanan, Alexander F., Montrose, N. Y. Block-printing machine.	Aug. 27, 1878	892	263	14	330
207, 491	Same. Apparatus for the manufacture of oil-cloth.	Aug. 27, 1878	893	263	14	330
199, 409	Buchanan, Alonzo Monroe, Moberly, Mo. Velocipede.	Jan. 22, 1878	722	212	13	136
207, 496	Buchanan, John, Philadelphia, Pa. Apparatus for producing ozone.	Aug. 27, 1878	897	264	14	330
	Buchanan, W. C., et al. (See Harrison, Theophilus, assignor.)					
	Bucher, John R., et al. (See Gibbs, Lewis, assignor.)					
205, 348	Buchholz, Herman, Springfield, Mass. Firemen's belt-hook.	June 25, 1878	1000	206	13	1156
200, 126	Buchhorn, Fritz, Chicago, Ill. Parlor-fountain.	Feb. 12, 1878	245	74	13	280
203, 998	Buck, Charles H., jr. (See Clement, Benjamin F., assignor.)					
203, 999	Buck, D. Azro A., Worcester, Mass. Watch-plate.	May 21, 1878	827	237	13	944
204, 000	Same. Watch-escapement.	May 21, 1878	828	237	13	944
	Buck, D. Azro A., Worcester, assignor to self and Edward A. Locke, Boston, Mass. Watch.	May 21, 1878	830	237	13	944
				238		
201, 741	Buck, Myron M., Saint Louis, Mo. Railway-lantern.	Mar. 26, 1878	967	296	13	573
	Buckeye Engine Company. (See Thompson & Hunt, assignors.)					
	Same. (See Thompson, Joseph W., assignor.) (Reissue.)					
	Buckeye Iron and Brass Works. (See Krutzsch, William, assignor.)					
208, 069	Buckhout, Adna H., Oakland, Cal. Hot-air grate.	Sept. 17, 1878	530	158	14	425
201, 324	Buckingham, Catharanus P., Chicago, Ill. Manufacture of cultivator-sleeves.	Mar. 19, 1878	534	164	13	507
	Buckingham, E. L. (See Dillon, James Walker, assignor.)					
210, 913	Buckingham, Joseph P., Chicopee, and Oliver M. Hamilton, Springfield, assignors of one-third interest to George A. Denison, Chicopee, Mass. Paper box.	Dec. 17, 1878	599	166	14	918
203, 414	Buckley, Chauncey, and Lodowick L. Sawyer, Meriden, Conn. Curtain-roller and bracket.	May 7, 1878	186	54	13	846
204, 001	Same. Curtain-roller and bracket.	May 21, 1878	834	238	13	945
	Buckley, George E., et al. (See Leclerc, Francis, assignor.)					
	Buckley, J. W., et al. (See Pine, John W., assignor.)					
200, 502	Buckley, Robert C., Peoria, Ill. Sulky-plow.	Feb. 19, 1878	628	185	13	346
207, 009	Buckley, William Henry, assignor to William C. Lawson, Philadelphia, Pa. Ferrule for spading-fork.	Aug. 13, 1878	371	114	14	256
201, 647	Bucklin, James Magee, Knightsville, assignor of one-half interest to Ensign Bennett, Michigan City, Ind. Fastening for railway-rail joints.	Mar. 26, 1878	880	268	13	560
200, 503	Buckton, William, Philadelphia, Pa. Machine for polishing and finishing cord.	Feb. 19, 1878	629	185	13	346
199, 689	Budd, Elijah Carey, Prairie Green, Ill. Sulky-plow.	Jan. 29, 1878	1035	302	13	193
203, 319	Budd, Harry R. and William N., Bunker Hill, Ill. Hog-cholera compound.	May 7, 1878	91		13	832
199, 258	Budd, John C., Brooklyn, N. Y. Sweat-leather for hats.	Jan. 15, 1878	557	164	13	103
	Budd, William N. (See Budd, Harry R. and William N.)					
203, 588	Budge, Matthew, Middlebury, Conn. Dumping-wagon.	May 14, 1878	387	110	13	881
	Budington, H. Joseph. (See Budington, Walter J., assignor.)					
204, 532	Budington, Walter J., Hudson, assignor to Joseph H. Budington, Kingston, N. Y. Manufacture of hydraulic cement.	June 4, 1878	102		13	1027
208, 459	Budlong, James F., Providence, R. I. Stitch-ripper.	Oct. 1, 1878	7	2	14	489
205, 610	Budlong, Simeon, and Walter Orlando Talcott, Providence, R. I. Belt-fastener.	July 2, 1878	150	45	14	28
	Buehrig, Charles. (See Buehrig, Frederick and Charles.)					
204, 478	Buehrig, Frederick and Charles, Fort Madison, Iowa. Lamp-burner.	June 4, 1878	60	20	13	1021
207, 850	Buel, James, Woburn, Mass. Lifting-jack.	Sept. 10, 1878	284	87	14	388
209, 222	Buell, Frank A., Brooklyn, N. Y. Saw-set.	Oct. 22, 1878	856	248	14	619
200, 504	Buell, Harriet J., New York, N. Y. Pillow.	Feb. 19, 1878	630	185	13	346
	Buell, Jaynes S. (See Phelps, Charles Hilton, assignor.)					
203, 702	Buell, Madison, Buffalo, assignor of one-half interest to Walter B. Moore, New York, N. Y. Apparatus for carburizing air and gas.	May 14, 1878	501	142	13	896
	Buffalo Steam and Lantern Company. (See Ham, Charles, assignor.)					
205, 999	Buffham, George R., Brooklyn, N. Y. Ventilator for windows.	July 16, 1878	605	174	14	94
	Buford, Basil D., et al. (See Hien, Phillip, assignor.)					
	Bugbee, G. W. (See Doane & Bugbee.)					
	Bugg, F. H., et al. (See Catlin, Seth C., assignor.)					
	Buhler, M. (See Dean, George B., assignor.)					
200, 168	Buie, Duncan M., assignor to self and James F. Post, Wilmington, N. C., and David D. Barber, Mayesville, S. C. Manufacturing oils from organic substances.	Feb. 12, 1878	287	85	13	285
	Bulckeus, Frank. (See Grinnell & Bulckeus.)					
201, 648	Bulkeley, Worthington, Ballston Spa, N. Y. Barrel-hoisting clamp.	Mar. 26, 1878	881	268	13	560
190, 617	Bull, George, and Louis Koch, New Orleans, La. Bale-band tightener.	Jan. 29, 1878	962	279	13	182
200, 010	Bull, Henry C., Brooklyn, N. Y. Breech-loading fire-arm.	Oct. 15, 1878	610	177	14	581
	Same. Operating heavy ordnance.	Oct. 15, 1878	612	178	14	581
209, 451	Same. Filter.	Oct. 29, 1878	1100	320	14	677
209, 858	Same. Apparatus for supplying and filtering water.	Nov. 12, 1878	256	106	14	732

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. E.	Vol.	Page.
207, 010	Bullard, Ezekiel W., Barre, Mass. Hay-tedder.	Aug. 13, 1878	372	114	14	256
210, 180	Bullard, James H., Springfield, Mass., assignor to Daniel B. Wesson. Machine for checking pistol-handles.	Nov. 26, 1878	724	215	14	789
206, 660	Bullock, Daniel, Fort Atkinson, Wis. Machine for planing chair-backs.	Aug. 6, 1878	3	1, 2	14	207
199, 027	Bullock, E. Koyl, assignor of two-thirds interest to William J. Miller and James M. Curtiss, Detroit, Mich. Corset.	Jan. 8, 1878	316	93	13	65
203, 114	Bullock, Joseph, Cohoes, N. Y., assignor, by mesne assignments, to Joseph Bullock, trustee. Machine for winding bobbins.	Apr. 30, 1878	1354	394	13	799
	Bullock Printing Press Company. (See Bullock, William, assignor.) (Reissue.)					
205, 525	Bullock, Smith W., Newark, N. J., assignor to Daniel Barnum, Brooklyn, N. Y. Ore-separator.	July 2, 1878	64	19	14	17
202, 700	Bullock, Thomas H., Cleveland, Ohio. Bellows-nozzle.	Apr. 23, 1878	928	265	13	740
8, 145	Bullock, William, deceased, Richard Vose, administrator and assignor to Bullock Printing Press Company, Philadelphia, Pa. Machine for damping paper. (Reissue.)	Mar. 26, 1878	1112	336	13	593
	Bulough, John. (See Lancaster, William, assignor.) (Reissue.)					
200, 252	Bulymore, Richard, Buffalo, N. Y. Apparatus for refining lard.	Feb. 12, 1878	367	109	13	298
208, 370	Same. Apparatus for utilizing exhaust-steam.	Sept. 24, 1878	862	251	14	470
207, 407	Bump, Frank E., and Joel W. Gear, New Cassel, Wis. Plow-beam.	Aug. 27, 1878	898	264	14	331
205, 472	Bundy, William, Carthage, Ind. Hoe.	July 2, 1878	9	3	14	10
205, 048	Bunker, Augustus S., Lawrence, Mass. Fruit-huller.	June 18, 1878	671	196	13	1108
207, 408	Same. Tobacco-cutter.	Aug. 27, 1878	899	265	14	331
210, 989	Bunnell, Isaac S., Carbondale, Pa. Bed-bottom.	Dec. 17, 1878	683	188	14	928
199, 508	Bunting, Roger W., Madison, Mich. Land-roller.	Jan. 22, 1878	819	239	13	152
210, 003	Bunting, William, jr., Flushing, N. Y. Water-closet.	Nov. 19, 1878	524	157	14	758
209, 650	Burbank, Abner, assignor to Austin V. M. Sprague, Edmund Ocumpaugh, and George W. Ross Lewin, Rochester, N. Y. Heating apparatus.	Nov. 5, 1878	128	37	14	608
	Burbank, A. N. (See Fisher, A. H., assignor.)					
210, 594	Burch, Edwin K. (See French, Aaron F., assignor.)	Dec. 10, 1878	234	64	14	863
210, 004	Burch, William H., and James E. Curtiss, Canandaigua, N. Y. Slipper.	Nov. 19, 1878	525	158	14	758
203, 115	Burchard, John A., Freeport, Ill. Bag-tie and address-holder.					
	Burckard, Augustus, Crisfield, Md., assignor of one-half interest to Isaac H. Coulborne. Barrel for packing fruit.	Apr. 30, 1878	1356	395	13	800
	Burden, Frederick Cheever. (See Burden, William Henry & Frederick Cheever.)					
200, 893	Burden, William Henry and Frederick Cheever, Cleveland, Ohio. Car-axle box.	Mar. 5, 1878	76	26, 27	13	427
206, 860	Burdick, Ambrose C., Coldwater, Mich. Fruit-drier.	Aug. 13, 1878	224	72	14	238
204, 129	Burdick, Norman, and James Easterly, Albany, N. Y. Molding dovetails in metal castings.	May 28, 1878	985	280	13	968
	Burgau, Friedrich. (See Dieckmann & Burgau.)					
199, 896	Burger, Theodore W., Plainfield, N. J. Spice-box.	Feb. 5, 1878	6	2	13	233
204, 533	Burgess, Albert, Cambridge, Mass. Feed mechanism for sewing-machines.	June 4, 1878	103	35	13	1027
8, 288	Burgess, Andrew, Owego, N. Y. Magazine-gun. (Reissue.)	June 18, 1878	793	235	13	1124
210, 001	Same. Magazine fire-arm.	Nov. 19, 1878	615	183	14	770
210, 181	Same. same.	Nov. 26, 1878	725	215	14	789
210, 182	Same. Magazine-gun.	Nov. 26, 1878	726	216	14	789
210, 394	Same. Magazine fire-arm.	Nov. 26, 1878	844	248	14	804
				249		
210, 395	Same. Magazine-gun.	Nov. 26, 1878	845	249	14	804
199, 259	Burgess, Benjamin, Baltimore, Md. Machine for making molds for car-wheels.	Jan. 15, 1878	558	164	13	103
208, 371	Burgess, Benjamin, assignor of one-half interest to J. N. Conway, Baltimore, Md. Casting car-wheels.	Sept. 24, 1878	863	251	14	470
200, 431	Burgess, George W., Skowhegan, Me. Ruffler for sewing-machines.	Feb. 10, 1878	562	165	13	335
208, 791	Burgess, Hugh, Royer's Ford, Pa. Covering for steam pipes, generators, &c.	Oct. 8, 1878	362	103	14	544
208, 792	Same. Apparatus for making tubes of plastic material.	Oct. 8, 1878	363	103	14	545
205, 049	Burgess, Josiah, Zanesville, Ohio. Furnace for heating soldering-irons.	June 18, 1878	672	197	13	1108
200, 026	Burgess, Warren S., assignor to John H. Dager and George W. Grady, Norristown, Pa. Air-pump.	Feb. 5, 1878	131	43	13	254
206, 661	Same. Sheep-shearing machine.	Aug. 6, 1878	4	2	14	207
199, 500	Burgess, William Harvey, Jackson P. O., N. C. Baling-press.	Jan. 22, 1878	820	240	13	152
	Burghardt, John H. (See Miles, William A., assignor.)					
199, 785	Bürgin, Emil, New York, N. Y. Apparatus for deaerating water.	Jan. 29, 1878	1123	330	13	207
199, 786	Bürgin, Emil, Basle, Switzerland. Steam-condensing and gas and air compressing apparatus.	Jan. 29, 1878	1124	330	13	207
	Same. Electrical lamp.	July 16, 1878	684	198	14	104
200, 083	Bürgin, Emil, New York, N. Y. Magneto-electric and electro-magnetic machine.	July 16, 1878	685	198	14	105
206, 084	Burggraf, George, et al. (See Roberts, Edward J., assignor.)					
210, 595	Burlans, Augustus H., Burlington, Iowa. Advertising merchandise-car.	Dec. 10, 1878	234	64	14	863
	Burkart, Gustave, et al. (See Kimberly, Amos E., assignor.)					
203, 000	Burke, Dominic, New York, N. Y. Stationary wash-tub of hydraulic cement.	July 16, 1878	606	174	14	94
202, 926	Burke, Melancthon T., Portsmouth, Ohio. Saddle-stirrup.	Apr. 30, 1878	1178	339	13	776
204, 420	Same. Stirrup.	June 4, 1878	6	3	13	1013
207, 246	Burke, Patrick, Rochester, N. Y. Stop-rock casing.	Aug. 20, 1878	626	187	14	291
202, 224	Burke, Patrick C., Philadelphia, Pa. Packing box and case for fruits.	Apr. 9, 1878	389	114	13	658
203, 703	Burke, William, Syracuse, N. Y. Adjustable draft-bar for sleighs.	May 14, 1878	502	142	13	896
203, 704	Burkhardt, Gustav, Homer, Ill. Washing-machine.	May 14, 1878	503	143	13	896
208, 150	Same. Adjustable pipe-fastener.	Sept. 17, 1878	616	182	14	436
199, 690	Burkholder, John, Centerville, Ohio. Wheat-steaming apparatus.	Jan. 29, 1878	1036	302	13	133
208, 460	Burkholder, David K., Lancaster, Pa. Straw and feed cutter.	Oct. 1, 1878	8	2	14	489
205, 834	Burkle, John G., assignor of one-half interest to J. B. Schroder, Cincinnati, Ohio. Shoemaker's lap-iron.	July 9, 1878	417	118	14	65
200, 090	Burleigh, Charles, Fitchburg, Mass. Rock-drill.	Feb. 26, 1878	841	247	13	385
207, 580	Burlingame, Albert H., Sparta, Ill. Rolling colter.	Sept. 3, 1878	5	2	14	349
201, 909	Burlingham, William, Baltimore, Md. Pump.	Apr. 2, 1878	51	14	13	605
207, 590	Burnap, John A., Albany, N. Y. Steam-pump.	Sept. 3, 1878	6	3	14	350
201, 863	Burnett, Marshall, Hyde Park, Mass. Napkin-supporter.	Apr. 2, 1878	6	2	13	599
202, 225	Burnett, Theodore, Springfield, Ohio. Vehicle-wheel.	Apr. 9, 1878	390	114	13	658
210, 996	Burnham, Elbert L., Yonkers, N. Y. Fire-escape.	Dec. 10, 1878	513	64	14	863
8, 393	Burnham, John L., assignor to John C. Wands, Nashville, Tenn. Car-roof. (Reissue.)	Aug. 20, 1878	720	215	14	304
199, 260	Burnham, Lyeurgus Woburn, and Daniel G. Chase, Somerville, Mass. Hair-curling device.	Jan. 15, 1878	561	164	13	103
202, 780	Burnham, Nathaniel, Amboy, Ill. Staple-hook.	Apr. 23, 1878	1014	291	13	751
	Burnham, William H. (See Hawson & Burnham.)					
202, 327	Burnitz, Christian, Chicago, Ill. Convertible chair.	Apr. 10, 1878	515	151	13	680
202, 985	Burns, Charles Moranza, Hamler, Ohio. Corn plow and marker.	Apr. 30, 1878	1234	356	13	783
200, 894	Burns, Garrett, assignor to Rand, McNally & Co., Chicago, Ill. Varnishing-machine.	Mar. 5, 1878	76	27	13	427
200, 820	Burns, James, London, Ontario, Canada. Gas-retort.	Mar. 5, 1878	6	2	13	416



*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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210, 900	Burns, James, assignor of one-half interest to Peter L. Baunen, Verona, Pa. Welding copper.	Dec. 17, 1878	684	-----	14	928
201, 222	Burns, Patrick H., and William G. McElhany, Indiana, Pa., assignors to said Burns. Plow.	Mar. 12, 1878	403	124	18	482
204, 479	Burns, Patrick H., Indiana, Pa. Chill for hubs.	June 4, 1878	61	20	13	1021
202, 986	Burns, Robert. (See Pickles & Burns.)					
201, 742	Burns, Willis B., Syracuse, N. Y. Trace-carrier.	Apr. 30, 1878	1235	357	13	784
209, 012	Burnshow, James H., Baltimore, Md. Machine for making wood rosettes.	Mar. 26, 1878	967	296	13	574
210, 597	Same..... Tool for making rosettes from wood.	Oct. 15, 1878	616	179	14	582
	Burpee, Moses, Upper Sheffield, Canada. Car-coupling.	Dec. 10, 1878	236	64	14	864
199, 143	Burr, Eugene G. (See Rayner & Burr.)					
206, 662	Burr, Melbourne C., Minneapolis, Minn. Horse hay-rake.	Jan. 15, 1878	449	{ 132 } 133	13	86
	Burr, Remus D., Kingsborough, N. Y. Gauntlet-fastener.	Aug. 6, 1878	5	2	14	207
	Burrell, D. H., et al. (See Dougherty, John B., assignor.)					
	Burrell, David H. (See McEachren, John D., assignor.)					
	Same..... (See Smith, Freeman & Burrell.)					
	Burrell, Ives & Co., et al. (See Dougherty, John B., assignor.)					
	Burrell, Ives & Co. (See Fairchild, Curtiss T., assignor.)					
207, 499	Burrell, Jarvis, East Bridgewater, assignor to Edward A. Curtis, Somerville, and Edward L. Mitchell, Boston, Mass. Printing-press.	Aug. 27, 1878	900	265	14	331
200, 169	Burris, M. Elliott, New York, N. Y., assignor to William Burris, Washington, D. C. Vehicle-spring.	Feb. 12, 1878	288	86	13	286
198, 067	Burris, William. (See Burris, M. Elliott, assignor.)					
201, 743	Burritt, Harvey H., and George A. Obl, Newark, N. J. Furnace-grate.	Jan. 8, 1878	258	73	13	55
207, 163	Burroughs, Charles. (See Hyatt & Burroughs.)					
200, 233	Burroughs, Caleb C., Decatur, Ill. Corn-sheller.	Mar. 26, 1878	968	296	13	574
	Same..... same.	Aug. 20, 1878	536	161	14	280
205, 724	Burroughs, Joseph, assignor of one-half interest to Daniel Donson, Dayton, Ohio. Feed-wheel for grain-drills.	Feb. 12, 1878	360	109	13	296
210, 405	Burroughs, Winfield S., assignor of one-half interest to Thomas S. Johnson, Friendship, Ind. Middlings-separator.	July 9, 1878	296	87	14	50
198, 028	Burrows, Edward T., Portland, Me. Window-screen.	Dec. 3, 1878	109	29	14	838
209, 018	Burrows, Henry, Georgetown, assignor of one-half interest to William H. Godey, Washington, D. C. Fire-escape.	Jan. 8, 1878	220	62	13	49
205, 635	Burrows, James, Manchester, N. H. Needle.	Oct. 15, 1878	622	180	14	583
209, 456	Burrows, William T., Nashua, Iowa. Wagon-rack.	July 9, 1878	418	118	14	65
	Same..... Device for converting reciprocating motion into rotary.	Oct. 20, 1878	1102	{ 320 } 321	14	658
206, 223	Burstall, Philipp F. L., Milwaukee, Wis. Burglar-alarm.	July 23, 1878	866	247	14	131
210, 005	Burt, Andrew S., Omaha, Neb. Tent.	Nov. 19, 1878	526	158	14	758
203, 320	Burt, George E., and Edwin A. Hildreth, Harvard, Mass. Horse-power.	May 7, 1878	91	26	13	832
209, 455	Burt, John, Detroit, Mich. System of ventilation.	Oct. 29, 1878	1101	310	14	638
202, 927	Burt, John W., Jr., Garner's Station, Miss. Cotton-gin.	Apr. 30, 1878	1178	340	13	776
207, 943	Burtch, Gilbert F., Jackson, Mich. Washing-machine.	Sept. 10, 1878	369	117	14	401
200, 691	Burtey, Henri, Paris, France. Button-fastener.	Feb. 26, 1878	842	248	13	385
209, 750	Burnett, Daniel H. (See Sloane, William M., assignor.)					
209, 547	Burton, Charles H., Cleveland, Ohio. Steam-engine.	Nov. 12, 1878	244	72, 73	14	718
8, 518	Burton, George F., assignor of two-thirds interest to Rockwell J. Flint and Frank J. McLean, Menomonee, Wis. Wagon-lock.	Nov. 5, 1878	9	3, 4	14	682
200, 127	Burwell, Charles E., Miller's Falls, and Frank G. Bates, Philadelphia, Pa. Friction-clutch.	Dec. 10, 1878	482	136	14	896
200, 372	Busack, Christian, Lansing, Ill. Revolving harrow.	Feb. 12, 1878	246	74	13	280
202, 328	Busby, George F., Lynn, Mass. Burglar-alarm.	Feb. 19, 1878	505	149	13	327
8, 239	Buschell, John Henry, Ottawa, Ohio. Farm-gate and hagger.	Apr. 16, 1878	516	151	13	680
210, 006	Busell Edge Trimming Company. (See Busell, James H., assignor.) (Reissue.)					
	Busell, James H., Boston, Mass., assignor, by mesne assignments, to Busell Edge Trimming Company. Heel and sole trimming machine.	May 21, 1878	960	274	13	961
199, 510	Busell, James H., Boston, Mass. Rotary cutter for trimming boot and shoe soles and heels.	Nov. 19, 1878	526	158	14	758
207, 103	Buser, William E., Chillicothe, Ohio. Wash-stand.	Jan. 22, 1878	822	240	13	152
207, 388	Busey, Charles E., Baltimore, Md. Dental rubber-dam clamp.	Aug. 20, 1878	481	144	14	273
207, 247	Busey, Jerome F., Beck's Mills, Pa. Machine for bending chain-links.	Aug. 27, 1878	781	232	14	317
207, 248	Bush, Arthur, Boulder, Colo. Water-motor.	Aug. 20, 1878	627	187	14	291
200, 170	Bush, David P., and Julius A. Krauspe, Wilmington, Del. Cartridge for fire-arms.	Aug. 20, 1878	628	188	14	291
	Bush, Henry F., and Martin Luther, Douglassville, Pa. Machine for sharpening mower and reaper knives.	Feb. 12, 1878	290	86	13	286
207, 711	Bush, Martin Luther. (See Bush, Henry F. and Martin Luther.)					
199, 787	Busher, Dennis, Effingham, Ill. Sully.	Sept. 3, 1878	127	30	14	365
201, 495	Buskett, James L., Saint Louis, Mo. Intrenching-tool.	Jan. 29, 1878	1126	331	13	208
200, 974	Buss, Edward, Magdeburg, Prussia. Tachometer or speed-indicator.	Mar. 19, 1878	704	215	13	532
200, 975	Bussey, Esck, assignor of one-half interest to Charles A. McLeod, Troy, N. Y. Stove-shelf.	Mar. 5, 1878	151	40	13	439
205, 050	Same..... Stove-oven.	Mar. 5, 1878	152	49	13	439
198, 968	Same..... Damper for stoves.	June 18, 1878	673	197	13	1108
205, 725	Bussey, William C., assignor of one-half interest to Andrea Camons, San Francisco, Cal. Bill-file.	Jan. 8, 1878	259	74	13	56
202, 701	Bustin, William H., Boston, Mass. Hame-tug eye.	July 9, 1878	298	88	14	50
205, 350	Butcher, Henry C. (See Van Haagen, Anthony, assignor.) (Reissue.)					
208, 565	Butcher, Joseph, assignor of two-thirds interest to William Klausner and Henry C. Dobson, New York, N. Y. Compartment-vessel.	Apr. 23, 1878	929	265	13	740
208, 956	Butcher, Joseph, assignor of two-thirds interest to Henry C. Dobson and William Klausner, New York, N. Y. Faucet for compartment-vessels.	June 25, 1878	1001	296	13	1156
209, 013	Butcher, Joseph, New York, N. Y. Rotary engine.	Oct. 1, 1878	113	32, 33	14	504
206, 226	Same..... Sharpener for tailors' chalk.	Oct. 15, 1878	555	162	14	574
201, 496	Same..... Valve-gear for steam-engines.	Oct. 15, 1878	616	179	14	582
202, 516	Butler, Charles W., New York, N. Y. Stop-hinge for trunks, &c.	July 23, 1878	868	248	14	131
202, 147	Butler, Cornelius H., New York, N. Y. Broom-brace.	Mar. 19, 1878	705	215	13	532
204, 193	Butler, Edward K. (See Dooley, Thomas Brown, assignor.)					
201, 744	Butler, Francis G., Bollovs Falls, Vt. Butter-worker.	Apr. 16, 1878	696	204	13	705
198, 836	Butler, George Lucien, Merrittsville, S. C. Seed-planter.	Apr. 9, 1878	300	91	13	617
	Butler, Jonathan S., Rock Island, Ill. Lamp.	May 28, 1878	1062	302	13	977
	Butler, Orvin E., Lamaille, Iowa. Fence-post.	Mar. 26, 1878	969	296	13	574
	Butler, Stephen D., New Buffalo, Mich. Bedstead-fastening.	Jan. 1, 1878	113	32	13	26
	Butler, Thomas L. (See Butler, William A., assignor.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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198, 912	Butler, William A., assignor to Thomas L. Butler, New York, N. Y. Safety-pin .....	Jan. 1, 1878	197	56	13	39
199, 511	Same .....	Jan. 22, 1878	823	240	13	153
206, 928	Butler, William T., Boston, Mass. Shawl-strap .....	Aug. 13, 1878	295	90	14	246
199, 182	Butman, Thomas R., Milan, Ohio. Furnace-door .....	Jan. 15, 1878	489	144	13	92
205, 349	Butron, Manuel, Havana, Cuba. Comb .....	June 25, 1878	1000	296	13	1156
209, 223	Butterfield, George F., Boston, Mass. Metal-founder's ladle .....	Oct. 22, 1878	850	248	14	620
200, 602	Butterfield, John, Woodlawn, Mo. Self-dropper for planters .....	Feb. 26, 1878	843	238	13	386
	Butterfield, Leander S. (See Gilmore, James, assignor.) .....					
202, 928	Butterworth, Enoch Bruce, Ottawa, Ontario, Canada. Heating apparatus .....	Apr. 30, 1878	1179	340	13	776
205, 611	Butterworth, Jonathan, Worcester, Mass. Heddle-rod tightener .....	July 2, 1878	151	46	14	29
203, 885	Button, Alphonzo, assignor of two-thirds interest to Josiah Ames and Mark J. Liddell, East Saginaw, Mich. Scoop .....	May 21, 1878	701	200	13	928
210, 007	Button, Jesse, New York, N. Y. Drilling-machine for artesian and other wells .....	Nov. 19, 1878	527	158	14	758
198, 921	Butts, Austin C., Newark, N. J. Glove .....	Jan. 1, 1878	205	58	13	40
207, 501	Butts, Austin Charles, Newark, N. J. Boxing-glove .....	Sept. 3, 1878	8	3	14	350
198, 791	Butts, William, Petaluma, Cal. Fruit and hop drier .....	Jan. 1, 1878	75	19, 20	13	19
204, 654	Butz, Edward M., Allegheny, Pa. Hydraulic-power apparatus .....	June 11, 1878	237	74, 75	13	1049
208, 070	Buxton, Benjamin F., Brookfield, Vt. Apparatus for drying moist boots and mittens .....	Sept. 17, 1878	531	159	14	425
200, 505	Buxton, Levi W., Nashua, N. H. Heel-plate for boots and shoes .....	Feb. 19, 1878	631	186	13	346
203, 321	Buzzard, Benjamin, and Andrew P. Snyder, assignors to selves and Samuel Leaman, Ashland, Ohio. Bee-hive .....	May 7, 1878	93	26	13	832
200, 432	Buzzell, Charles N., assignor to self and E. H. Nealley, Monroe, Me. Shelf for stove-ovens .....	Feb. 19, 1878	563	166	13	335
199, 512	Buzzell, George H., assignor to self and Frederic E. Stevens, Boston, Mass. Device for absorbing the noise of escaping steam .....	Jan. 22, 1878	824	241	13	153
202, 226	Buzzell, John G., Lynn, Mass. Machine for shaving and whitening leather .....	Apr. 9, 1878	391	114	13	658
202, 929	Buzzell, John P., assignor to Bigelow Carpet Company, Clinton, Mass. Bobbin for loom-shuttles .....	Apr. 30, 1878	1180	340	13	776
		Sept. 24, 1878	781	228	14	460
208, 290	Byard, Perry, Leetonia, Ohio. Lubricating car-wheels .....	Dec. 10, 1878	312	85	14	873
	Bye, Martin. (See Johnson & Bye.) .....					
210, 607	Byers, Charles C. (See Byers, John F., assignor.) .....					
	Byers, John F., Ravenna, Ohio, assignor of one-half interest to Charles C. Byers, Meadville, Pa. Oatmeal-machine .....	Dec. 10, 1878	312	85	14	873
	Byrn, Edward W. (See Holden & Byrn.) .....					
202, 227	Byrne, Christopher, Conneaut, Ohio. Locomotive head-light .....	Apr. 9, 1878	392	115	13	658
204, 194	Byrne, James H., Detroit, Mich. Shipping-case .....	May 28, 1878	1053	302	13	978
202, 629	Byrne, Joseph, assignor to self, Sullivan M. Waldron, and James McGrath, Boston, Mass. Valve for barrels, kegs, &c. ....	Apr. 23, 1878	849	245	13	732
210, 668	Byrne, Joseph, assignor to self, James McGrath, and Daniel Madden, Boston, Mass. Valve for barrels, kegs, &c. ....	Dec. 10, 1878	313	85	14	873
201, 990	Byrne, Richard, Brooklyn, assignor of one-half interest to Joseph J. Marrin, New York, N. Y. Grinding-stone for paint-mills .....	Apr. 2, 1878	127	37	13	617
203, 706	Byrne, Robert H., and Edward D. Knight, Camden, N. J. Tap for barrels .....	May 14, 1878	505	143	13	896
209, 797	Byrne, Sylvester, Boston, Mass. Washing-machine .....	Nov. 12, 1878	292	87	14	724
210, 901	Byrne, William, assignor of two-thirds interest to Henry O'Neil and O. M. Goddard, Auburn, N. Y. Temporary binder .....	Dec. 17, 1878	685	188	14	928
	Bywaters, Joseph K., et al. (See Morris, James P., assignor.) .....					
8, 453	Cabell, Samuel G., Washington, D. C., assignor, by mesne assignments, to Leon Abbott and Daniel Jackson. Fluting-machine .....	Oct. 15, 1878	721	209	14	597
204, 130	Cabot, Samuel, Jr., assignor to Charles W. Slade, Boston, Mass. Composition to be used as mordants and dye-stuffs .....	May 28, 1878	986	.....	13	968
	Cachot, Maximilian A. (See Le Clerc & Cachot.) .....					
202, 408	Caddick, George, Allegheny, Pa. Piano .....	Apr. 16, 1878	593	174	13	691
201, 223	Caddick, Samuel, Pembroke, Me. Burning fuel in metal-working furnaces .....	Mar. 12, 1878	404	124	13	483
208, 886	Caddy, William H., Brooklyn, N. Y. Smoking-pipe .....	Oct. 15, 1878	475	136	14	563
199, 201	Caden, Franz Rudolph, and Thomas Hamblen McCray, Evansville, Ind. Holder for a mower-knife-sharpening tool .....	Jan. 15, 1878	502	165	13	103
208, 950	Cadett, James W. T., 68 Camberwell Grove, Surrey County, England. Camera .....	Oct. 15, 1878	556	162	14	574
207, 592	Cadwalader, Howard, Richmond, Ind. Pump .....	Sept. 3, 1878	9	3	14	350
205, 612	Cady, Arah B., assignor of one-half interest to Frederick Candee, Bethlehem, Conn. Bog-cutting plow .....	July 2, 1878	152	46	14	29
203, 415	Cady, Edwin, assignor to Meriden Cutlery Company, West Meriden, Conn. Carving-fork .....	May 7, 1878	188	54	13	846
	Same .....	May 21, 1878	836	239	13	945
204, 002	Cady, Frank P., assignor to Hogen Stamped Elbow Company, Cleveland, Ohio. Machine for forming joint-flanges .....	Aug. 27, 1878	735	220	14	311
207, 342	Cady, Henry G., Bellville, Ark. Feed-water heater .....	Mar. 26, 1878	882	268	13	560
201, 640	Cady, Monroe B. (See Heggaard, Christian August, assignor.) .....					
	Same .....	(See Passoo, Lew, assignor.) .....				
201, 910	Caesar, August, New York, N. Y. Flux composition for emery-tools .....	Apr. 2, 1878	53	.....	13	606
	Caffrey, Charles S. (See Paul, Harry B., assignor.) .....					
	Caffisch, Carl Arnold. (See Gröble, Caffisch & Wehrli.) .....					
	Calhoone, Edwin R., Newark, N. J. Harness .....	May 28, 1878	1003	303	13	978
204, 195	Same .....	Nov. 5, 1878	129	37	14	698
209, 651	Cain, Andrew C. W., Pittsburg, Pa. Boot and shoe exhibitor .....	Feb. 12, 1878	246	75	13	280
200, 128	Cain, George E. (See Adams, Cain & Simonton.) .....					
	Cain, James, Pittsburg, Pa. Window-awning .....	Jan. 1, 1878	76	20	13	19
198, 792	Cain, John, Sandy Lake, assignor, by mesne assignments, to Stearns Manufacturing Company, Erie, Pa. Head-block for saw-mills .....	Apr. 9, 1878	497	145	13	673
8, 162	Same .....	(See Christman & Caldwell.) .....				
	Cain, Thomas J., assignor, by mesne assignments, to Alfred Adams, Cleveland, Ohio. Hose-rack .....	Dec. 3, 1878	11	3, 4	14	826
210, 402	Caldwell, H. P. (See Wickham, Horace, Jr., assignor.) .....					
203, 887	Caldwell, Henry W., and William Watson, Saint Louis, Mo. Elevator-boot .....	May 21, 1878	703	201	13	928
	Caldwell, J., et al. (See Westinghouse, George, Jr., assignor.) .....					
	Caldwell, John. (See Christman & Caldwell.) .....					
8, 027	Caldwell, John K., Philadelphia, Pa. Brick-carrying car .....	Jan. 8, 1878	431	126	13	83
200, 771	Same .....	Aug. 6, 1878	117	37	14	221
208, 566	Same .....	Oct. 1, 1878	114	33	14	504
8, 134	Caldwell, Levi, assignor to Cyrus A. Dodge, Burgetstown, Pa. Washing-machine .....	Mar. 26, 1878	1089	331	13	590
201, 224	Calcf, Joseph Warren, North Easton, Mass., assignor to Oliver Ames. Washing-machine .....	Mar. 12, 1878	406	125	13	483
204, 712	Calloun, Madison, Ocate, assignor to self and Samuel Edge, Fort Union, N. Mex. Hame-fastening .....	June 11, 1878	299	92	13	1058
204, 948	Calkins, Belus, Varysburg, N. Y. Fence-post .....	June 18, 1878	574	168	13	1095

*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
210, 093	Calkins, Dickerson A., Monson, Mass. Horse hay-rake .....	Nov. 19, 1878	617	{ 183 184	14	771
201, 156	Call, Albert, assignor of one-half interest to David J. Miller, Santa Fé, N. Mex. Mail-bag .....	Mar. 12, 1878	341	105		473
209, 457	Call, Albert, Santa Fé, N. Mex. Safety-click for watch barrels .....	Oct. 29, 1878	1104	321	14	658
207, 389	Call, Ambrose A., Algona, Iowa. Ball-target thrower .....	Aug. 27, 1878	780	233	14	817
202, 787	Call, Asa C., Algona, Iowa. Forming ice in separated layers .....	Apr. 23, 1878	1015	291	13	751
209, 859	Callahan, Cornelius, assignor of two-thirds interest to Edwin E. Sibley, Chelsea, Mass. Attaching handles to hose .....	Nov. 12, 1878	357	106	14	732
209, 860	Same..... Textile fabric hose-pipe .....	Nov. 12, 1878	357	107	14	732
201, 991	Callaway, James Fleming, Louisville, Ky. Circuit-closer for alarms .....	Apr. 2, 1878	128	38	13	617
203, 886	Callaway, James F. (See Ernwein, Peter, assignor.) .....					
203, 886	Callier, Joseph, Cambridge, Mass. Machine for pasting together and drying rolls or continuous sheets of paper and other fabrics .....	May 21, 1878	702	201	13	928
201, 745	Calvert, Calender I., Philadelphia, Pa. Harness .....	Mar. 26, 1878	971	297	13	574
	Cambria Iron Company. (See Davis, Frank B., assignor.) .....					
	Same..... (See Jones, Daniel N., assignor.) .....					
210, 238	Cameron, Elizabeth W. M. (See Cameron, John F., assignor.) .....					
210, 238	Cameron, John F., New York, assignor to Elizabeth W. M. Cameron, Brooklyn, N. Y. Air ship .....	Nov. 26, 1878	785	233	14	797
205, 351	Cammack, William, et al. (See Atkinson, Mahlon B., assignor.) .....					
205, 351	Cammell, Bernard E., Sheffield, and James Duffield, Dronfield, England. Treating cast-steel ingots .....	June 25, 1878	1001	296	13	1156
	Cammeyer, Alfred J. (See Miller, Peter, assignor.) .....					
	Camons, Andrea. (See Bussey, William C., assignor.) .....					
203, 116	Camp, Charles Barton, and Nathaniel Gardner, White Pigeon, Mich. Clothes-wringer .....	Apr. 30, 1878	1357	395	13	800
201, 225	Camp, Edmund J., Alpharetta, Ga. Plow .....	Mar. 12, 1878	407	125	13	483
205, 051	Camp, Nelson H., West Meriden, assignor to Charles Parker Company, Meriden, Conn. Lock-hinge .....	June 18, 1878	674	197	13	1108
208, 071	Camp, Thomas, Covington, Ga. Cotton-condenser .....	Sept. 17, 1878	532	159	14	425
	Campbell, Alfred S. (See Price & Campbell.) .....					
201, 226	Campbell, Andrew, Brooklyn, N. Y. Printing press .....	Mar. 12, 1878	408	{ 125 126	13	483
202, 400	Campbell, Braxton W., Cincinnati, Ohio. Counter-support for boots and shoes .....	Apr. 16, 1878	594	175		691
	Campbell & Clute. (See Paul, Archibald, assignor.) .....					
	Campbell Edward R., et al. (See Rosa, William B. and James S., assignors.) .....					
206, 001	Campbell, Frank M., assignor to Robert S. McCormick, Saint Louis, Mo. Grain-spout for elevators .....	July 16, 1878	606	175	14	94
	Campbell, George, et al. (See Carr, William H., assignor) .....					
209, 326	Campbell, George, Norfolk, and William Lidgett, Newton, Mass. Pulp-strainer .....	Oct. 29, 1878	967	282	14	638
204, 882	Campbell, George Gardin, Milwaukee, Wis. Catch-basin cover .....	June 18, 1878	506	148	13	1086
	Campbell, H. C., et al. (See Gillen, William S., assignor.) .....					
	Campbell, J., et al. (See Luse, Daniel and Daniel F., assignors) .....					
	Campbell, J. A., et al. (See Luse, Daniel and Daniel F., assignors) .....					
8, 203	Campbell, John, Almonte, Ontario, Canada. Churn .....	June 18, 1878	801	237	13	1126
	Campbell, Jones & Co. (See Kirk, Henry, assignor.) .....					
201, 325	Campbell, Loudon, and James F. Richards, assignors of one-third interest to William M. Rees, Pittsburg, Pa. Flanging-machine .....	Mar. 19, 1878	535	164	13	507
205, 241	Campbell, Loudon, and James F. Richards, Pittsburg, Pa. Machine for flanging boiler-heads .....	June 25, 1878	884	{ 261 262	13	1141
200, 976	Campbell, Marvin, South Bend, Ind. Adjustable strainer for milk-pails .....	Mar. 5, 1878	152	50		439
203, 117	Same..... Heating-stove .....	Apr. 30, 1878	1358	395	13	800
205, 242	Same..... Metal bucket .....	June 25, 1878	885	262	13	1141
207, 500	Campbell, Peter, Carrollton, Pa. Combined tool .....	Aug. 27, 1878	901	265	14	831
201, 326	Campbell, Remembrance H., assignor of one-half interest to Norton P. Chipman, Red Bluff, Cal. Flume .....	Mar. 19, 1878	537	165	13	508
208, 401	Campbell, Robert, Allegheny, Pa. Harvester .....	Oct. 1, 1878	9	2, 3	14	490
208, 887	Campbell, Solon Owen, Tower Hill, Ill. Seeding-machine .....	Oct. 15, 1878	475	137	14	564
209, 224	Canaday, Hugh H., Fairfield, Iowa. Riding-cultivator .....	Oct. 22, 1878	857	249	14	620
210, 992	Canaday, Hugh Henry, Fairfield, Iowa. Plow .....	Dec. 17, 1878	686	189	14	928
200, 254	Candee, Charles E., Saint Louis, Mo. Car-wheel .....	Feb. 12, 1878	370	109	13	298
	Candee, Frederick. (See Cady, Arab B., assignor.) .....					
	Candee & Co., L. (See Elliott, Lewis jr., assignor.) .....					
	Same..... (See Watkinson, George, assignor.) .....					
201, 157	Candee, Vales A., Bristol, Conn. Galvanic electrode for curative purposes .....	Mar. 12, 1878	342	105	13	473
200, 693	Candlish, Thomas Charles, Saint Joseph, Mo. Corset-clasp .....	Feb. 26, 1878	844	248	13	386
208, 567	Candy, John B., Trenton, N. J. Attachment to lathes for cutting rubber and other rings .....	Oct. 1, 1878	117	34	14	504
204, 003	Canedy, William Eaton, Rochester, Minn., and Edwin Ezekiel Leach, Cedar Rapids, Iowa. Fence-post .....	May 21, 1878	836	239	13	945
210, 993	Canfield, Andrew, Davenport, Iowa. Cultivator .....	Dec. 17, 1878	687	189	14	928
200, 255	Canfield, Isaac Watts, jr., and Cantine Hasbrouck Demarest, Nyack, N. Y. Ventilator .....	Feb. 12, 1878	371	109	13	298
207, 712	Cantelo, James, Cedar Rapids, Iowa. Water-valve .....	Sept. 3, 1878	128	40	14	365
209, 861	Same..... Swing-pipe for water-tanks .....	Nov. 12, 1878	358	107	14	733
204, 106	Capen, Elida Maria, Charlton Depot, Mass. Index-tag for books .....	May 28, 1878	1065	303	13	978
201, 650	Capern, John C., New York, N. Y. Screw-propeller .....	Mar. 26, 1878	882	208	13	560
	Capps, August L. (See Bailey, Emmert & Capps.) .....					
201, 092	Capron, Frank E., assignor to self, Harford A. and Herbert S. Capron, Providence, R. I. Bracelet-joint .....	Mar. 12, 1878	276	85	13	464
	Capron, Harford A., et al. (See Capron, Frank E., assignor.) .....					
	Capron, Herbert S., et al. (See Capron, Frank E., assignor.) .....					
	Capron, Maturen R. (See English, William J., assignor) .....					
188, 761	Card, Benjamin F., Brooklyn, N. Y. Turnstile-register .....	Jan. 1, 1878	38	9, 10	13	14
206, 163	Same..... Railway-car .....	July 23, 1878	798	228	14	122
208, 957	Same..... Railway-track .....	Oct. 15, 1878	556	162	14	574
209, 956	Card, George F., Guthrie, Ill., assignor of one-half interest to Thomas F. Corry, Covington, Ky. Cartridge-loading device .....	Nov. 19, 1878	468	141	14	751
203, 416	Card, Milton E., Cazenovia, N. Y. Ball-target thrower .....	May 7, 1878	188	54	13	840
200, 602	Card, William L., Moberly, Mo. Automatic car-brake .....	Feb. 26, 1878	748	219	13	372
201, 594	Same..... Automatic railway-brake .....	Mar. 26, 1878	825	251	13	552
207, 501	Same..... Automatic car-brake .....	Aug. 27, 1878	901	266	14	331
201, 746	Cardarelli, Emilio, Washington, D. C. Siphon .....	Mar. 26, 1878	971	297	13	574
	Cardozo, Laura Jane. (See Cardozo, Thomas Whitmarsh, assignor.) .....					
201, 911	Cardozo, Thomas Whitmarsh, assignor to Laura Jane Cardozo, Brooklyn, N. Y. Spring-pillow .....	Apr. 2, 1878	54	14	13	606



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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr.-g.	Vol.	Page.
205, 243	Carey, Augustus C., Boston, Mass. Sewing-machine needle.....	June 25, 1878	886	262	13	1141
	Carey, Henry C., et al. (See Morrison, George W., assignor.)					
	Carey, John, et al. (See Emig, Adam and Theodor, assignors.)					
200, 171	Carey, John J., La Salle, Ill. Corn-planter attachment.....	Feb. 12, 1878	291	86	13	286
	Carey, John R. (See Watkins & Carey.)					
209, 158	Carlisle, John H., and John T. Taylor, Whitaker's, N. C. Indexing apparatus.....	Oct. 22, 1878	792	230	14	611
201, 747	Carlisle, William S., Watertown, N. Y. Latch for sliding doors.....	Mar. 26, 1878	972	297	13	574
200, 458	Carlson, Andreas M., Brooklyn, N. Y. Calendar-clock.....	Oct. 29, 1878	1104	321	14	658
199, 514	Carlton, George, Saint John's, Michigan. Extension-ladder.....	Jan. 22, 1878	826	241	13	153
207, 390	Carlton, George L., and George H. Crager, Omaha, Neb. Locking-hinge for sleeping-car berths.....	Aug. 27, 1878	783	233	14	317
	Carlton, William E., et al. (See Robbins, Joseph A., assignor.)					
	Carmen, James W. (See Boykin & Carmen.)					
207, 011	Carmen, Charles E., Lyons, Ohio. Telephone-resonator.....	Aug. 13, 1878	372	114	14	256
210, 694	Carnagy, Alexander P., Summit Bridge, Del. Mail-bag.....	Dec. 17, 1878	688	190	14	929
202, 517	Carnegie, Thomas M., Pittsburg, Pa. Utilizing scrap steel.....	Apr. 16, 1878	697	.....	13	705
210, 449	Carnell, George C., Glassborough, N. J. Ironing and bosom board.....	Dec. 3, 1878	63	15	14	832
206, 164	Carnes, Philom P., Cleveland, Ohio. Gun-sight.....	July 23, 1878	799	229	14	122
202, 987	Carnes, Samuel, Jonesborough, Ga. Plow-stock.....	Apr. 30, 1878	1235	357	13	784
201, 093	Carnes, William James, jr., Gonzales, Tex. Buckle.....	Mar. 12, 1878	277	86	13	464
201, 497	Carnoy, Thomas, Saint Louis, Mo. Silvering glass mirrors.....	Mar. 19, 1878	705	.....	13	532
210, 496	Carrick, John, Cresskill, N. J. Malt extract.....	Dec. 3, 1878	110	.....	14	838
204, 796	Caro, Heinrich, Mannheim, Grand Duchy of Baden, Germany. Production of dye-stuffs from methyl-aniline.....	June 11, 1878	391	.....	13	1068
204, 707	Same..... Methyl-aniline violet color.....	June 11, 1878	393	.....	13	1068
204, 798	Same..... Ethyl-rosaniline dye-stuff.....	June 11, 1878	394	.....	13	1068
204, 799	Same..... Dye-stuff produced from naphthylamine.....	June 11, 1878	395	.....	13	1068
	Carothers, William T. (See Martin & Carothers.)					
208, 958	Carpenter, Charles H., Syracuse, N. Y. Coin-holder.....	Oct. 15, 1878	557	163	14	574
207, 012	Carpenter, Charles S., Philadelphia, Pa. Vehicle-wheel.....	Aug. 13, 1878	373	115	14	256
200, 985	Carpenter, Francis W., Harrison, N. Y. Axle-lubricator.....	Mar. 5, 1878	160	52	13	440
207, 249	Carpenter, George W., South Bend, Ind. Vapor-bath apparatus.....	Aug. 20, 1878	629	188	14	292
210, 914	Carpenter, Herbert M., Minneapolis, Minn. Manufacture of paper-pulp from wood.....	Dec. 17, 1878	600	.....	14	918
201, 387	Carpenter, James Cagwin, Council Grove, Kans. Plow.....	Mar. 19, 1878	598	183	13	516
209, 225	Carpenter, James Latty, Vineland, N. J. Stock-feeding device.....	Oct. 22, 1878	858	249	14	620
207, 944	Carpenter, Jason J., Constable, N. Y. Hame.....	Sept. 10, 1878	389	117	14	401
204, 131	Carpenter, Lyman C., Syracuse, N. Y. Organ-case.....	May 28, 1878	987	281	13	968
210, 915	Carpenter, Oramill C., Brooklyn, assignor to Robert Farley, jr., N. Y. Compound hydraulic engine.....	Dec. 17, 1878	600	166	14	918
200, 694	Carpenter, Thomas F., New York, N. Y. Fire-escape.....	Feb. 26, 1878	844	{ 248 } 249	13	386
205, 836	Carpenter, William B., assignor to self and Celluloid Novelty Company, Newark, N. J. Bracelet.....	July 9, 1878	419	119	14	65
208, 291	Carr, Adam, Paterson, and James Arthur, assignors, by mesne assignments, to William S. Carr, Jersey City, N. J. Direct-acting engine and pump.....	Sept. 24, 1878	782	228	14	400
208, 072	Carr, Charles, Boston, Mass. Hydrant.....	Sept. 17, 1878	532	159	14	425
205, 052	Carr, Clayborn A., Casey, Ill. Double-action pump.....	June 18, 1878	675	198	13	1108
199, 410	Carr, Edward R., Avon, Ill. Check-rower attachment for corn-planters.....	Jan. 22, 1878	723	213	13	137
208, 671	Carr, John, Minneapolis, Minn. Thill-coupling.....	Oct. 8, 1878	230	66	14	527
	Carr, Martin W., et al. (See Porter, Stephen, assignor.)					
	Same..... (See Schoals, John R., assignor.)					
202, 228	Carr, Thomas Beals, Wilmington, N. C. Dredger.....	Apr. 9, 1878	394	115	13	659
8, 391	Carr, William H., Troy, N. Y., assignor to George Campbell and John Clute. Lurr for knitting-machines..... (Reissue.)	Sept. 3, 1878	211	65	14	375
200, 373	Carr, William S. (See Carr & Arthur, assignors.)					
205, 784	Carrier, Francois, New York, N. Y. Lamp.....	Feb. 19, 1878	506	149	13	327
	Carrier, John Henderson, Barton Russell Baker, and William McCarty, London, Ky. Washing-machine.....	July 9, 1878	363	104	14	58
199, 513	Carriker, Malachi Armstrong, and Noah Joshua, Litchfield, Ill. Bee-hive.....	Jan. 22, 1878	825	241	13	153
200, 027	Carriker, Noah Joshua. (See Carriker, Malachi Armstrong and Noah Joshua.)					
207, 250	Carriker, William M., Irving, Ill. Corn-planter.....	Feb. 5, 1878	132	43	13	254
	Same..... Corn-planter and check-row marker.....	Aug. 20, 1878	630	188	14	292
	Carrington, Samuel R., et al. (See Lees, Thomas, assignor.)					
	Carrington, Walter T., et al. (See Lees, Thomas, assignor.)					
	Carrington, William E., et al. (See Lees, Thomas, assignor.)					
210, 450	Carris, Seth D., Keota, Iowa. Garden-rake.....	Dec. 3, 1878	64	16	14	832
206, 085	Carroll, Albert H., Baltimore, Md. Bobbin-supporter for spooling-machines.....	July 16, 1878	687	198	14	105
208, 292	Carroll, John. (See Shamberger & Carroll.)					
	Carroll, Joseph, assignor to George W. Russell, Lawrence, Mass. Emptying-valve for paper-pulp engine.....	Sept. 24, 1878	784	229	14	460
	Carroll, Julius. (See Whiting, James M., assignor.)					
201, 327	Carroll, Thomas J., Bridgeport, Conn. Garment-supporter.....	Mar. 19, 1878	538	165	13	508
203, 417	Carson, Hugh, assignor to Alexander Speer & Sons, Pittsburg, Pa. Cultivator-teeth.....	May 7, 1878	189	55	13	846
	Carson, James. (See Jenkins, David, assignor.)					
	Carson, James G., et al. (See Travis, Thomas W., assignor.)					
201, 158	Carter, Albert, New York, N. Y. Spring for mattresses.....	Mar. 12, 1878	343	105	13	473
206, 536	Carter, Charles, Philadelphia, Pa. Mold for making medicinal compressed wafers, pills, lozenges, &c.....	July 30, 1878	1230	354	14	180
207, 013	Same..... Coated compressed medicament.....	Aug. 13, 1878	374	115	14	256
208, 713	Carter, Charles C., Decatur, Ill. Adjustable check-cutter.....	Oct. 8, 1878	276	78	14	533
204, 883	Carter, Charles D., Allegan, assignor of one-half interest to John T. Carter, Spring Arbor, Mich. Cultivator.....	June 18, 1878	506	148	13	1086
202, 650	Carter, Charles H., Brooklyn, N. Y. Electro-magnetic burglar-alarm.....	Apr. 23, 1878	851	245	13	732
206, 086	Carter, Egbert P., Arcade, N. Y. Side spring.....	July 16, 1878	688	199	14	105
200, 506	Carter, Emma, Folsom City, Cal. Bee-feeding device.....	Feb. 19, 1878	632	186	13	346
205, 726	Carter, Francis M., Marlborough, Mass. Skiving-machine.....	July 9, 1878	298	83	14	50
210, 183	Same..... Skiving-machine for leather..... (Reissue.)	Nov. 26, 1878	728	216	14	789
	Carter, George P. (See Woods & Carter.)					
209, 019	Carter, Henry S., Chicago, Ill. Bed-lounge.....	Oct. 15, 1878	622	180	14	582
200, 895	Carter, James J., Sacramento, Cal. Steam-engine for sawing-machine.....	Mar. 5, 1878	78	27	13	427
208, 151	Carter, John F., Gloucester, Mass. Overcoat.....	Sept. 17, 1878	616	182	14	436
	Carter, John T. (See Carter, Charles D., assignor.)					
109, 183	Carter, John W., assignor to John W. Carter, jr., Brooklyn, N. Y. Extension-channelier.....	Jan. 15, 1878	401	144	13	92

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209, 226	Carter, Joseph, Blythe, Ontario, Canada. Steam-boiler cleaner	Oct. 22, 1878	859	249	14	620
201, 748	Carter, Samuel C., Liberty, Ind. Dental plate	Mar. 26, 1878	973	297	13	574
209, 652	Carter, Thomas Henry. (See Thomas & Carter.)					
206, 537	Carter, William Thomson, Village Springs, Ala. Harvester-thrasher	Nov. 5, 1878	130	38	14	698
203, 223	Cartier, Emile, Nassandres, France. Bag-holder	July 30, 1878	1232	354	14	180
200, 821	Carton, John, Utica, N. Y. Hot-air furnace and stove	Sept. 24, 1878	707	208	14	451
200, 986	Cartwright, Robert, Rochester, N. Y. Hopper for pneumatic dredging-scows	Mar. 5, 1878	7	2	13	416
202, 148	Carty, Martin, Newark, N. J. Die for molding plastic substances	Mar. 5, 1878	161	52	13	440
203, 533	Carvalho, Solomon N., assignor to self and James M. Pattee, New York, N. Y. Heat- ing attachment to boiler and other furnaces	Apr. 9, 1878	307	91	13	647
207, 851	Carver, Henry I., Ludlow, Mass. Butter-worker	May 14, 1878	333	95	13	874
	Carver, James W., Lynn, Mass. Tacking-machine	Sept. 10, 1878	285	87, 88	14	388
	Carver, Thomas F. (See Boynton, Colburn & Carver.)					
190, 184	Carvill, Alphonso H., et al. (See Elliot, Alfred L., assignor.)					
209, 459	Cas, Henry H., Cleveland, Ohio. Fire-kindler	Jan. 15, 1878	492	144	13	93
198, 871	Cas, Hiram P., Detroit, Mich. Chuck	Oct. 29, 1878	1106	322	14	658
202, 518	Cas, L. W. (See Merrill, Elisha H., assignor.)					
204, 004	Cas, Meigs, Oneonta, N. Y. Machine for treating spine-disease	Jan. 1, 1878	151	43	13	32
199, 515	Cas, Whiting & Co. (See Weed, Clinton A., assignor.)					
8, 502	Casey, John, Jersey City, N. J. Smoke and cinders conveyer for railway-trains	Apr. 16, 1878	608	204	13	705
207, 104	Same. Checking apparatus	May 21, 1878	837	239	13	945
207, 713	Same. Station-indicator	Nov. 10, 1878	528	159	14	759
210, 497	Casey, Michael, New Britain, Conn. Window-frame	Jan. 22, 1878	820	241	13	153
207, 104	Cash, Evan F. et al. (See Baron, Alfred L., assignor.)					
207, 713	Cash, Evan F. (See Baron, Cash & Rankin.)					
207, 104	Cash, Evan F., and Alfred L. Baron, assignors of one-third interest to David Rankin, Bellaire, Ohio. Lantern	Nov. 19, 1878	718	214	14	784
207, 713	Cash, Evan F., assignor to self, Alfred L. Baron, and David Rankin, Bellaire, Ohio. Lantern	Aug. 20, 1878	481	145	14	273
210, 497	Cash, Evan F., and Alfred L. Baron, assignors to David Rankin, Bellaire, Ohio. Lantern	Sept. 3, 1878	129	40	14	366
201, 867	Cash Recording Machine Company. (See Moss, Smith & Hill, assignors.)					
209, 020	Casilear, George W., Washington, D. C. Manufacture of paper for bank-notes, bonds, checks, &c	Dec. 3, 1878	111	.....	14	838
207, 945	Cass, A. A., et al. (See Stockbridge, Lyman R., assignor.) (Reissue.)					
210, 403	Cass, Christopher M., South Evanston, Ill. Lamp	Apr. 2, 1878	10	3	13	600
200, 095	Cass, Cyrus N., Decatur, Ill. Rope-holding reel	Oct. 15, 1878	623	181	14	583
201, 388	Cass, William Baldwin, Blanchester, Ohio. Hydraulic motor	Sept. 10, 1878	390	{ 117 118 }	14	401
200, 095	Casson, John, Sheffield, England. Circular-saw guide	Dec. 3, 1878	12	4, 5	14	826
201, 388	Castillo, Jesus M., New York, N. Y. Hat-holder	Feb. 20, 1878	840	249	13	386
201, 388	Castle, Christopher, Cleveland, Ohio. Hand hose-carriage	Mar. 19, 1878	599	184	13	516
204, 713	Castle, Oliver H. (See Polk & Castle.)					
205, 057	Castle, Samuel D. (See Diamond & Castle.)					
210, 598	Castle, William H., Geneva, Ohio. Towel-rack	June 11, 1878	300	93	13	1058
205, 785	Same. Clothes-fork	Nov. 19, 1878	470	142	14	751
199, 349	Castleden, George, Canterbury, England. Tobacco-pipe	Dec. 10, 1878	237	65	14	864
199, 349	Caswell, Ezra, Lyons, N. Y. Whip-socket and rein-holder	July 9, 1878	363	105	14	58
199, 350	Caswell, William A., assignor of one-half interest to E. B. Preston, Chicago, Ill. Hose- coupling	Jan. 22, 1878	661	194	13	127
202, 149	Same. Apparatus for attaching hose to couplings	Jan. 22, 1878	662	194	13	127
202, 988	Cate, Henry S., Barnhart's Mills P. O., Pa. Bed-bottom	Apr. 9, 1878	309	92	13	647
204, 480	Same. Packing for oil-wells	Apr. 30, 1878	1236	357	13	784
208, 294	Same. Chair seat and back	June 4, 1878	61	20	13	1021
	Cate, Henry S., Millerstown, Pa. Bed-bottom	Sept. 24, 1878	786	229	14	460
204, 534	Cates, R. S. (See Emory, Homer C., assignor.)					
	Cates, Robert S., et al. (See Young, Frederick, assignor.)					
204, 534	Cather, Edwin, assignor of one-half interest to James R. Trimble, Baltimore, Md. Machine for boring blind stiles	June 4, 1878	104	35	13	1027
204, 132	Catlin, Emma F. (See Catlin, Seth C., assignor.)					
199, 144	Catlin, Emma F., et al. (See Catlin, Seth C., assignor.)					
207, 105	Catlin, Frederick, Newark, N. J. Telegraph-repeater	May 28, 1878	988	281	13	968
208, 203	Catlin, Seth C., assignor to P. H. Bugg and Emma F. Catlin, Brooklyn, N. Y. Lamp- burner	Jan. 15, 1878	451	133	13	86
200, 256	Same. Student's lamp	Aug. 20, 1878	483	145	14	274
198, 837	Catner, James M., Cleveland, Ohio. Hitching apparatus	Sept. 24, 1878	785	229	14	460
201, 159	Caton, Emanuel B., assignor of one-half interest to Robert Colman, Washington, D. C., and John T. Clements, Saint Joseph, Mo. Combined indicator and seal-lock	Feb. 12, 1878	371	110	13	298
199, 958	Caton, Hugh V., Patricksburg, Ind. Running-gear for vehicles	Jan. 1, 1878	114	33	13	26
201, 160	Cattell, Levi C., Cleveland, Ohio. Clothes-drier	Mar. 12, 1878	344	100	13	473
202, 788	Cauhapé, Pierre, New York, N. Y. Cigar-package	Feb. 5, 1878	68	22	13	254
8, 005	Caulier, Frederick. (See Hand & Caulier.)	Mar. 12, 1878	344	106	13	474
200, 028	Caulier, Frederick, Philadelphia, Pa. Nursery-chair	Apr. 23, 1878	1015	291	13	752
210, 098	Caum, Edward L., assignor of seven-eighths interest to Caroline J. Dougherty, Harris- burg, W. D. Moore, Wilkesbarre, Henry Lewis, Frederick J. Kimball, and J. Snowden Bell, Philadelphia, Pa. Draft and buffing apparatus for railway-cars	Feb. 10, 1878	736	216	13	362
205, 244	Cavalier, Peter, Yankton, Dak. Lamp-reflector	Feb. 5, 1878	133	44	13	254
209, 433	Cavalier, Peter, Yankton, Dak. Reflector	Nov. 19, 1878	618	184	14	771
200, 257	Cavanagh, George H., Boston, Mass. Pile-driver	June 25, 1878	887	262	13	1141
200, 258	Cavanagh, James H., San Francisco, Cal. Screen	Feb. 19, 1878	563	106	13	336
198, 989	Cave, Thomas H. (See Hagenbaugh & Van Orman, assignors.)					
200, 129	Caverley, Peter H., Brooklyn, N. Y. Bottle-stopper fastener	Feb. 12, 1878	372	110	13	298
	Caverly, Samuel L., Brooklyn, N. Y. Wash-board	Feb. 12, 1878	373	110	13	259
	Cawker, Samuel M., Denver, Colo. Combined pump and measuring-faucet	Jan. 8, 1878	260	74	13	56
	Cawood, John, New York, N. Y. Refrigerator for cooling beer kegs and bottles	Feb. 12, 1878	247	75	13	280
	Celluloid Manufacturing Company. (See Hyatt & Jarvis, assignors.)					
	Same. (See Hyatt, John W., assignor.)					
209, 548	Celluloid Novelty Company. (See Carpenter, William B., assignor.)					
204, 535	Center, Lewis W., Potsdam, N. Y. Milk-cooler	Nov. 5, 1878	11	4	14	682
	Chabot, Anthony. (See Austin, Alvah C., assignor.)					
202, 789	Chadwick, Charles, assignor of two-thirds interest to Peter B. Groat, Hannibal, Mo., and John B. Schott, Quincy, Ill. Centrifugal pump	June 4, 1878	105	35	13	1027
	Chaffee, Charles B., Toledo, Ohio. Button	Apr. 23, 1878	1016	292	13	752

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210, 837	Chalas, Pierre, assignor to Peugeot frères, Valentigney, France. Combined pepper-mill and caster .....	Dec. 17, 1878	494	{ 139 } 140	14	906
210, 749	Chalender, George, Aurora, Ill. Center bearing for locomotive-trucks .....	Dec. 10, 1878	396	108	14	883
202, 702	Chalfant, Brantly, Williamsport, Pa. Die for cutting wooden pins .....	Apr. 23, 1878	930	266	13	740
205, 352	Chalfant, Isaac P., Philadelphia, Pa. Sad-irons .....	June 25, 1878	1003	297	13	1156
203, 888	Chalfant, Pleasant A., Independence, Cal. Newspaper wrapping and pasting machine .....	May 21, 1878	704	{ 201 } 202	13	929
199, 030	Challinor, David, Pittsburg, Pa. Manufacture of glassware .....	Jan. 8, 1878	319	94	13	65
202, 631	Challinor, David, assignor to self, John Lowery, and David F. Evans, Pittsburg, Pa. Machine for finishing open-ended glassware .....	Apr. 23, 1878	853	245	13	732
205, 473	Chalmers, William, and William N. Reynolds, Detroit, Mich. Sad-iron and fluter .....	July 2, 1878	10	3, 4	14	10
8, 201	Chamberlain, Edmund D., Westfield, N. J. Hand-stamp .....	Apr. 23, 1878	1168	335	13	770
204, 421	Same .....	June 4, 1878	7	3	13	1013
	Chamberlain, Edward H., et al. (See Duffie, John S., assignor.) .....					
209, 031	Chamberlain, John N., Springfield, Mass. Pressure-governing gas-burner .....	Oct. 15, 1878	624	181	14	583
	Chamberlain, Oliver Howard. (See Babcock, Whiting & Chamberlain.) .....					
	Chamberlain, Oliver W. (See Downing & Chamberlain.) .....					
8, 449	Chamberlin, Edward, et al. (See Chamberlin, Edwin, assignor.) .....					
	Chamberlin, Edwin, Troy, N. Y., assignor to self, Lee and Edward Chamberlin. Vehicle-spring .....	Oct. 15, 1878	716	207	14	596
8, 450	Same .....	Oct. 15, 1878	717	208	14	596
201, 329	Chamberlin, Elias L., Monroeville, Ohio. Shaft-supporter for vehicles .....	Mar. 19, 1878	539	166	13	508
205, 353	Chamberlin, Harrison T., Brockport, N. Y. Vaginal syringe .....	June 25, 1878	1004	297	13	1156
201, 328	Chamberlin, James S., Burlington, Vt. Gymnastic apparatus .....	Mar. 19, 1878	538	165	13	508
	Chamberlin, Lee, et al. (See Chamberlin, Edwin, assignor.) .....					
201, 227	Chamberlin, Thomas B., Clarinda, Iowa. Sulky-plow .....	Mar. 12, 1878	410	126	13	483
208, 462	Chambers, Benjamin C., Shady Plain, Pa. Combined hay-fork and pruning-shears .....	Oct. 1, 1878	10	3	14	490
	Chambers, Bering & Quinlan. (See Brown, William D., assignor.) .....					
	Same .....					
207, 252	Chambers, Cyrus, jr., and William Mendham, Philadelphia, Pa.; said Mendham assignor to said Chambers. Bolt-clipping machine .....	Aug. 20, 1878	631	189	14	292
207, 343	Chambers, Cyrus, jr., Philadelphia, Pa. Brick-machine .....	Aug. 27, 1878	736	{ 220 } 221	14	311
210, 396	Chambers, James M. (See Britt, Will J., assignor.) .....					
207, 106	Chambers, James Wright, assignor to Allen R. Blacklock, Baltimore, Md. Fan attachment for sewing-machine .....	Nov. 26, 1878	846	249	14	805
	Chambers, Maris, Bentivoglio, Va. Tobacco-flavoring .....	Aug. 20, 1878	483	.....	14	274
206, 702	Chambers, William. (See Smith, Hiram B., assignor.) .....					
	Chambers, William R., et al. (See Brown, William D., assignor.) .....					
207, 251	Chambers, William B., assignor to Chambers, Bering & Quinlan, Decatur, Ill. Check-row wire stop for corn-planter .....	Aug. 6, 1878	47	15	14	212
206, 323	Chambers, William B., and James E. Bering, assignors to Chambers, Bering & Quinlan, Decatur, Ill. Corn-planter .....	Aug. 20, 1878	630	188	14	292
201, 651	Chance, Henry, assignor of one-half interest to Rawson Crocker, Postoria, Ohio. Railway-crossing .....	July 23, 1878	985	280	14	145
199, 351	Chandler, Charles Holmes, assignor to self and William W. Clark, Foxcroft, Me. Rock-drill .....	Mar. 26, 1878	883	269	13	560
199, 352	Chandler, Henry, assignor to George C. Stearns, Buffalo, N. Y. Piston water-meter .....	Jan. 22, 1878	663	194	13	127
	Same .....	Jan. 22, 1878	665	195	13	128
199, 028	Chandler, Hiram. (See Allen & Chandler.) .....					
206, 002	Chandler, John M., Fredonia, N. Y. Fire-escape .....	Jan. 8, 1878	317	93	13	65
207, 391	Same .....	July 16, 1878	607	175	14	95
204, 133	Chandler, Josiah. (See Kirkham, Hulet & Chandler.) .....					
	Chandler, Lucius Stockin, and Samuel Norman Silver, Auburn, Me. Hydraulic engine. Roll-and-pitch indicator for vessels .....	Aug. 27, 1878	784	233	14	317
210, 239	Chandler, Ralph, Boston, Mass., assignor to self and Walton Brothers, New York, N. Y. Copying-book .....	May 28, 1878	989	281	13	968
	Chandler, Samuel, jr. (See Kerkham, Hulitt & Chandler.) .....					
	Chandler, William D., Edwin Wiekstead, and James D. Van Voorhis, Cranford, N. J. Copying-book .....	Nov. 26, 1878	786	233	14	797
8, 359	Chandler, William M. (See Tyler, Chandler & Standish.) .....					
202, 519	Channell, Ralph F., and Adolphus Bonzano, Phenixville, Pa. Photographic-plate holder .....	Aug. 6, 1878	202	65	14	231
206, 703	Chapin, Erastus M., Washington, D. C. Sewer-cleaning device .....	Apr. 16, 1878	699	204	13	706
	Chapin, Frank Marion, and Joshua Gersbacher, Cuffey's Cove, Cal. Vehicle torsion-spring .....	Aug. 6, 1878	48	15	14	212
209, 227	Chapin, Henry A. (See Leet & Chapin.) .....					
209, 228	Chapin, P. E. (See Foss, Henry A., assignor.) .....					
	Chapin, William W., Manistee, Mich. Furnace feeder .....	Oct. 22, 1878	860	249	14	620
	Same .....	Oct. 22, 1878	861	250	14	620
206, 424	Chaplin, Orril R., Boston, Mass. Metal-planing machine .....	July 30, 1878	1114	{ 318 } 319	14	166
202, 229	Chaplin, William H. (See Fenton, Hiram C., assignor.) .....					
199, 959	Chapman, Jacob, Wenona, Mich. Car-coupling .....	Apr. 9, 1878	394	115	13	659
204, 536	Chapman, John. (See Parmelee, Dubois D., assignor.) .....					
199, 897	Chapman, John C., Boston, Mass. Hatchet .....	Feb. 5, 1878	69	22	13	244
	Same .....	June 4, 1878	106	36	13	1027
202, 520	Chapman, John Y., assignor of one-half interest to Joseph W. Holmes, Buffalo, N. Y. Boy's sled .....	Feb. 5, 1878	7	2	13	233
210, 750	Chapman, Joseph L., assignor to James Watson, Philadelphia, Pa. Steam-trap .....	Apr. 16, 1878	701	205	13	706
204, 422	Chapman, Joseph L., assignor of one-half interest to John Roberts, Philadelphia, Pa. Gas-regulator .....	Dec. 10, 1878	398	108	14	883
207, 714	Chapman, Maro S., Manchester, Conn. Envelope .....	June 4, 1878	8	3	13	1013
208, 793	Chapman, Robert W., Newark, N. J. Bag-framing machine .....	Sept. 3, 1878	131	40	14	366
199, 788	Same .....	Oct. 8, 1878	364	104	14	545
202, 230	Chapman, Samuel J., assignor to self and Daniel S. Wilcox, Charleston, S. C. Bale-tie .....	Jan. 29, 1878	1127	331	13	208
198, 762	Chapman, Stanley L., assignor of one-half interest to Roscoe A. Perry, Chicago, Ill. Paper-bag holder .....	Apr. 9, 1878	395	116	13	659
	Chapman, Stephen, Clockville, N. Y. Horse hay-fork .....	Jan. 1, 1878	40	10	13	14
208, 512	Chapman, T. C. (See Way, William J., assignor.) .....					
200, 507	Chapman, Theron W., and Elisha King, Waterbury, Conn. Thill-coupling .....	Oct. 1, 1878	56	18	14	497
206, 772	Chapman, Thomas M., Old Town, Me. Stave-jointer .....	Feb. 19, 1878	632	186	13	346
205, 613	Chapman, William M., et al. (See Johnson, Andrew J., assignor.) .....					
	Chapman, William W., Washington, D. C. Cotton-planter .....	Aug. 6, 1878	119	37	14	221
	Charageat, Emile, Paris, France. Umbrella-frame .....	July 2, 1878	153	46	14	29

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199, 789	Chard, Richard J., Brooklyn, N. Y. Lubricating compound	Jan. 29, 1878	1128	.....	13	208
202, 703	Charles, S. Fredric, Cumming, Ga. Amalgamator	Apr. 23, 1878	931	266	13	740
	Charnbury, Henry. (See Corey & Charnbury.)					
	Chase, Amos F. (See Newhall & Chase.)					
205, 837	Chase, Amos F., Lynn, Mass. Lasting boots and shoes	July 9, 1878	419	119	14	66
210, 995	Chase, Andrew J., Boston, Mass. Refrigerator	Dec. 17, 1878	689	190	14	929
202, 989	Chase, Charles H., New Orleans, La. Bale-tie	Apr. 30, 1878	1236	357	13	784
	Chase, Daniel G. (See Burnham & Chase.)					
	Chase, George. (See Smith & Chase.)					
204, 949	Chase, J. Herbert, Cambridgeport, Mass. Mechanical musical instrument	June 18, 1878	575	168	13	1095
208, 010	Chase, John K., New York, N. Y. Screw-cap and stopper-fastener	Sept. 17, 1878	472	142	14	417
210, 397	Chase, Lorenzo, Portland, assignor of one-half interest to James O. Brown, Benton, Me. Musical instrument	Nov. 26, 1878	847	249	14	805
205, 053	Chase, Milton, Haverhill, Mass. Screw-propeller	June 18, 1878	675	198	13	1108
	Chase, S. B., et al. (See Bergstrom, Andrew, assignor.) (Reissue.)					
202, 521	Chase, Samuel T., Brooklyn, N. Y. Desiccating cocoa-nut	Apr. 16, 1878	702	.....	13	706
	Chase, Theo. L. (See Phelps, Ira M., assignor.)					
	Chase, Theo. L., et al. (See Phelps, Ira M., assignor.)					
	Chase, William D. (See Meinikheim & Chase.) (Reissue.)					
203, 589	Chatillon, John P., assignor to John Chatillon & Sons, New York, N. Y. Platform-scales	May 14, 1878	389	110	13	881
	Chatillon & Sons, John. (See Chatillon, John P., assignor.)					
206, 861	Chatterton, George H., Newark, assignor to self and John C. Chatterton, Rutherford, N. J. Illuminating advertising device	Aug. 13, 1878	225	72	14	239
	Chatterton, John C. (See Chatterton, George H., assignor.)					
205, 838	Chatterton, Richard D., Cobourg, Ontario, Canada. Car-coupling	July 9, 1878	420	119	14	66
210, 751	Chaumont, Jules, Woodhaven, N. Y., assignor to Lalanc & Grosjean Manufacturing Company. Manufacture of sheet-metal vessels	Dec. 10, 1878	399	109	14	884
208, 463	Cheever, Charles A., New York, N. Y. Switch for telephones	Oct. 1, 1878	11	3	14	420
205, 526	Chegwidden, John, New York, N. Y. Pump-handle	July 2, 1878	66	19	14	17
206, 862	Chegwin, William, Fond du Lac, Wis. Vehicle-spring	Aug. 13, 1878	227	72	14	239
207, 344	Same.....Sled	Aug. 27, 1878	741	221	14	312
208, 513	Chenette, Joseph E., Hillsborough, Oreg. Last	Oct. 1, 1878	57	18	14	497
203, 322	Chenette, Joseph Ezekiel, Hillsborough, Oreg. Last	May 7, 1878	94	27	13	833
	Cheney Brothers. (See Hudson, William E., assignor.)					
199, 790	Cheney, Henry C., assignor to Louie K. Hutchison, Hopkinton, Mass. Machinery for cutting pegs from boots and shoes	Jan. 29, 1878	1128	331	13	208
207, 852	Cherry, Alpheus F., Albany, Oreg. Screw-cutting lathe	Sept. 10, 1878	287	88	14	389
	Cherry, Leonard H. (See Seward, Marion F., assignor.)					
207, 946	Chew, Charles F., Bridgeport, Conn. Upright piano-forte action	Sept. 10, 1878	391	118	14	401
207, 947	Same.....Upright piano-forte frame	Sept. 10, 1878	392	118	14	401
199, 791	Chewning, John W., Jr., Shadwell Depot, Va., assignor of one-half interest to James and Nathan Rowland, Philadelphia, Pa. Cut-nail machine	Jan. 29, 1878	1129	331	13	203
	Chicago Malleable Iron Company. (See Search, Casper F., assignor.)					
	Chicago Plow Manufacturing Company. (See Lane, John, assignor.)					
	Chicago Stamping Company. (See Flint, William Wallace, assignor.)					
200, 508	Chichester, Franklin, Poughkeepsie, N. Y. Sewing-machine chair	Feb. 19, 1878	633	186	13	346
210, 095	Chicken, William, Chelsea, assignor of one-half interest to Theophilus S. Smith, Somerville, Mass. Bark-reducing machine	Nov. 19, 1878	619	184	14	771
207, 014	Childress, Patrick H., assignor of one-half interest to H. L. Gallaher, Waynesborough, Va. Millstone-driver	Aug. 13, 1878	375	115	14	256
210, 498	Childress, Patrick H., Waynesborough, Va. Millstone-driver	Dec. 3, 1878	111	29	14	838
208, 568	Childs, Addison, Ypsilanti, Mich. Paper-file	Oct. 1, 1878	118	34	14	505
	Childs, George K. (See Rice & Childs.)					
204, 197	Childs, Ira Oliver, Shreve, Ohio. Hedge fence	May 28, 1878	1065	303	13	978
202, 930	Childs, Oscar A., Cleveland, Ohio. Ice-creeper	Apr. 30, 1878	1181	341	13	773
202, 231	Childs, Thomas P., Troy, Ohio. Medical compound	Apr. 9, 1878	396	.....	13	659
202, 990	Chinnock, Charles E., Brooklyn, assignor to Ives, Blakeslee & Co., New York, N. Y. Jumping toy	Apr. 30, 1878	1237	358	13	784
	Chinnock, George H. (See Raymond & Chinnock.)					
202, 232	Chinnock, George H., Brooklyn, N. Y. Lamp-shade	Apr. 9, 1878	397	116	13	659
202, 233	Chinnock, George H., assignor to Leonard Richardson, Brooklyn, N. Y. Combined lamp shade and base	Apr. 9, 1878	398	116	13	659
202, 234	Same.....Lamp	Apr. 9, 1878	399	116	13	659
207, 253	Chipley, Lucien M., Saint Louis, Mo. Corset-cover	Aug. 20, 1878	633	189	14	203
8, 116	Chipman, George W., Boston, Mass. Stair-carpet pad	Mar. 12, 1878	518	158	13	497
	Chipman, Norton P. (See Campbell, Remembrance H., assignor.)					
201, 330	Chipman, Norton P., Red Bluff, Cal. Bunching lumber for running through V-shaped flumes	Mar. 19, 1878	540	166	13	503
	Chisholm, O. P. (See Mackh, Charles, assignor.)					
205, 474	Chittenden, Morgan, and William A. Lyon, Danbury, Conn. Lathe for turning ovals	July 2, 1878	11	4	14	10
	Chittenden, Thomas C., et al. (See Wheeler, Marshal, assignor.)					
198, 872	Chittcock, James, Saint Joseph, Mo. Portable burial vault	Jan. 1, 1878	152	44	13	32
204, 198	Choate, William Burnham, Aurora, Ill. Knob for tea and coffee pots	May 28, 1878	1066	303	13	978
	Choate, Winfield S. (See Rice, Charles R., assignor.)					
209, 379	Chomel, Isaac Antoine, Brooklyn, N. Y. Sweeping-machine	Oct. 29, 1878	1024	298	14	646
204, 199	Chow, Yung, San Francisco, Cal. Pocket for garments	May 28, 1878	1067	304	13	978
198, 929	Christey, Arthur, Buffalo, N. Y. Clasp	Jan. 8, 1878	221	62	13	40
204, 537	Same.....Clasps	June 4, 1878	107	36	13	1027
208, 464	Same.....Pencil-clasp	Oct. 1, 1878	12	3	14	499
209, 653	Christie, William, New York, N. Y. Trap	Nov. 5, 1878	130	38	14	638
202, 991	Christman, Edward, and John Caldwell, assignors to selves and James Taylor, Louisville, Ky. Baby's safety-chair	Apr. 30, 1878	1238	358	13	784
200, 987	Christmann, John, Washington, D. C. Policeman's club	Mar. 5, 1878	162	53	13	440
210, 096	Church, Benjamin S., Scarborough, N. Y. Pedometer	Nov. 19, 1878	620	184	14	771
	Church, George E. (See Corning, Cyrus, assignor.)					
205, 727	Church, Hannibal Hamlin, assignor to Lawrence Gas Company, Lawrence, Mass. Screen or grid for gas-purifiers	July 9, 1878	300	88	14	50
204, 800	Church, Henry A., Providence, R. I. Ornamental chain	June 11, 1878	395	116	13	1069
	Churchill, J. A., et al. (See Beckwith, Amos, assignor.) (Reissue.)					
	Churchill, John A. (See Turley, Marshall, assignor.)					
201, 331	Churchman, Edward S., Plain City, Ohio. Dust-conveyer for thrashing-machines	Mar. 19, 1878	540	166	13	508
	Chute, Charles R. (See Olmsted, Travis & Chute.)					
	Chute, Charles R. (See Travis & Chute.)					
205, 475	Citroen, Abraham B., Berlin, Prussia. Cigarette mouth-piece	July 2, 1878	12	4	14	10



## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. &	Vol.	Page.
210, 009	Claar, Samuel Scott, Bedford, Pa. Fifth-wheel for vehicles .....	Nov. 10, 1878	529	159	14	750
202, 093	Clabaugh, Levi, Warrior's Mark, Pa. Fruit-jar .....	Apr. 9, 1878	250	74	13	639
200, 603	Clager, Charlie. (See Mills & Clager.)					
201, 094	Clapp, Emerson D. and Frederick Van Patten, Auburn, N. Y. Machine for rolling blanks for carriage-axle clips .....	Feb. 26, 1878	740	{ 219 220 }	13	372
201, 094	Clapp, George P., assignor of two-thirds interest to John A. Pillow and Randolph Herscov, Montreal, Quebec, Canada. Machine for reducing the shanks of horseshoe-nail blanks .....	Mar. 12, 1878	277	86	13	464
199, 145	Clapp, Henry W., Concord, N. H. Sink-trap .....	Jan. 15, 1878	451	133	13	86
204, 885	Clapp, Mirtillow R., Hudson, N. Y. Boiler for steam fire-engine .....	June 18, 1878	508	148	13	1086
203, 118	Clardy, John W. (See Sprague & Clardy.)					
203, 118	Clark, Alexander H., Fond du Lac, Wis. Car-coupling .....	Apr. 30, 1878	1359	396	13	800
205, 830	Clark, Amasa C., Manchester, Iowa. Milk-cooler .....	July 9, 1878	421	120	14	66
207, 643	Clark, Ansel. (See Avery, John Porter, assignor.)					
207, 643	Clark, Archibald Thomas, Manchester, N. C. Farmer's tool and handle .....	Sept. 3, 1878	63	10	14	357
203, 410	Clark, Asa, et al. (See Vincent, George, assignor.)					
203, 410	Clark, B. S. (See Conklin, Solon, assignor.)					
203, 410	Clark, Beeri, Walpole, Mass. Churn .....	May 7, 1878	101	55	13	846
203, 418	Clark, Charles E., Buffalo, N. Y. Curtain-roller and bracket .....	May 7, 1878	190	55	13	846
204, 227	Same. Stove-pipe damper .....	July 23, 1878	868	248	14	131
208, 152	Same. Lock-hinge .....	Sept. 17, 1878	617	183	14	430
204, 950	Clark, Charles C., Rochester, N. H. Nozzle .....	June 18, 1878	575	108	13	1065
208, 465	Clark, Charles Ethan. (See Clark, William P. and Charles E.)					
208, 465	Clark, Charles T., Louisville, Ky. Cupola-tuyere and blast-deflector .....	Oct. 1, 1878	13	4	14	400
208, 514	Clark, Cullen B. (See Lyons, Marcus S., assignor.)					
200, 704	Clark, Daniel W. (See Longyear & Clark.)					
200, 704	Clark, E. J., et al. (See Condon, William F., assignor.)					
200, 704	Clark, Edward B. (See Clark, William S., assignor.)					
200, 704	Clark, Edward C., New Lebanon, N. Y. Thermometer .....	Oct. 1, 1878	58	18	14	497
201, 498	Clark, Elias R., and Robert Hamilton, La Fayette, Ind. Feathering paddle-wheel .....	Aug. 6, 1878	40	15	14	213
201, 498	Clark, Fayette C. (See Aspinwall & Clark.)					
200, 172	Clark, Francis, Springfield, Mo., assignor to J. A. Fay & Co., Cincinnati, Ohio. Saw-guide .....	Mar. 19, 1878	706	215	13	532
199, 793	Clark, Francis O., Des Moines, Iowa. Carpet-fastener .....	Feb. 12, 1878	292	87	13	286
201, 652	Clark, Frederick B. (See Guild & Clark.)					
210, 008	Clark, George, Buffalo, N. Y. Grain-drier .....	Jan. 20, 1878	1131	332	13	208
202, 962	Clark, George C., Freehold, N. Y. Horse potato-fork .....	Mar. 26, 1878	883	260	13	560
200, 538	Clark, George H. (See Michael, Archibald M., assignor.)					
207, 254	Clark, George M., Higganum, Conn. Vegetable-cutter .....	Nov. 19, 1878	624	185	14	771
207, 502	Clark, George Payson, Windsor Locks, Conn. Roll for wringing-machines .....	Apr. 30, 1878	1230	358	13	784
207, 502	Clark, George R., and Frank Lothrop, Dubuque, Iowa. Iron fence .....	July 30, 1878	1233	354	14	180
207, 502	Same. Fence-post and fence .....	Aug. 20, 1878	633	189	14	292
207, 502	Clark, George W., et al. (See Kenworthy & McGrogan, assignors.)					
201, 992	Clark, George W., New York, N. Y. Bottle .....	Aug. 27, 1878	903	266	14	331
202, 704	Clark, Henry. (See Fletcher, Thomas, assignor.)					
201, 992	Clark, Henry. (See Hitchcock, D. Gardner, assignor.)					
202, 704	Clark, Henry A., Boston, Mass. Treating linseed-oil .....	Apr. 2, 1878	129		13	618
208, 153	Clark, Henry L., and Augustus B. Smith, Chester, N. Y. Clothes-pin .....	Apr. 23, 1878	932	266	13	740
199, 353	Clark, Hiland K., et al. (See Grover & Beach, assignors.)					
200, 230	Clark, Hiram, Syracuse, N. Y. Chair .....	Sept. 17, 1878	018	183	14	437
202, 790	Clark, Hiram G., et al. (See Crowell, Solomon, assignor.)					
207, 644	Clark, Issachar, Tippecanoe City, Ohio. Arbor for gardens .....	Jan. 22, 1878	666	195	13	128
199, 411	Clark, James M., Newcastle, Pa. Feather-renovator .....	Oct. 22, 1878	863	250	14	620
204, 655	Clark, John, et al. (See Stevens, Charles V., assignor.)					
210, 185	Clark, John M., assignor of one-half interest to William L. May, Dayton, Ohio. Book-rack .....	Apr. 23, 1878	1017	292	13	752
199, 262	Clark, Joseph, Brooklyn, N. Y. Sewer-trap .....	Sept. 3, 1878	64	10	14	357
199, 411	Clark, Joseph H., Deering, Me. Shutter-fastening .....	Jan. 15, 1878	562	165	13	104
204, 655	Same. Horse-stall .....	Jan. 22, 1878	724	213	13	137
210, 185	Same. Horse-stall cushion .....	June 11, 1878	239	75	13	1060
199, 020	Clark, Josiah L., and John Stanfield, Westminster, England. Floating-dock .....	Nov. 26, 1878	730	217	14	790
200, 022	Clark, Levin P., Baltimore, Md. Water-closet .....	Jan. 8, 1878	318	93	13	65
200, 460	Same. Bedstead-fastening .....	Oct. 15, 1878	626	181	14	583
199, 691	Same. Hydrant .....	Oct. 29, 1878	1107	322	14	688
205, 245	Clark, Milton, and Charles A. Heckel, Decatur, Ill. Corn-stalk cutter .....	Jan. 29, 1878	1036	302	13	193
210, 097	Clark, Ormond A., Whitesborough, N. Y. Fence .....	June 25, 1878	888	263	13	1142
199, 794	Clark, Orson Williams, Appleton, Wis. Felt-stretcher for paper-machine .....	Nov. 19, 1878	622	185	14	771
202, 522	Clark, Perry Baker, Minneapolis, Minn. Fastening heads in metal cylinders .....	Jan. 20, 1878	1133	332	13	208
207, 503	Clark, Pharez Allen, Anaheim, Cal. Oscillating pump .....	Jan. 29, 1878	1130	332	13	208
202, 522	Clark, Richard. (See Ingalls & Clark.)					
200, 229	Clark, T. Emory, Boston, Mass. Safety attachment for bridles .....	Apr. 16, 1878	703	205	13	706
207, 503	Clark, Theodore Warren, Oregon City, Oreg. Measuring attachment to fulling-mills .....	Oct. 22, 1878	862	250	14	620
201, 332	Clark, Thomas Craven, Russellville, Ky. Grain-drill .....	Aug. 27, 1878	904	266	14	331
202, 235	Clark, Thomas W. (See Hyde, James S., assignor.) (Reissue.)					
201, 095	Clark, Thomas W., et al. (See McDonald, James W., assignor.)					
204, 538	Clark, William A., Westville, Conn. Lubricator .....	Mar. 19, 1878	541	167	13	508
209, 654	Same. same .....	Apr. 9, 1878	393	117	13	659
207, 392	Clark, William H., Chicago, Ill. Hydraulic engine .....	Mar. 12, 1878	279	86	13	464
210, 916	Clark, William Jesse, and Thomas William Roberts, Coffeyville, Miss. Fish-trap .....	June 4, 1878	107	36	13	1027
207, 392	Clark, William N., New York, N. Y. Soluble coating for pills .....	Nov. 5, 1878	131		14	698
210, 916	Clark, William Pendleton and Charles E. Belmont, N. Y. Horse hay-rake .....	Aug. 27, 1878	785	{ 233 234 }	14	317
203, 119	Clark, William S., assignor of one-half interest to Edward B. Clark, Philadelphia, Pa. Ventilator and overflow for sewer-pipes .....	Dec. 17, 1878	602	166	14	918
204, 134	Clark, William W. (See Chandler, Charles Holmes, assignor.)					
202, 329	Clark, William W., and Benjamin A. and Silas Bowman, Kirksville, Mo. Fire-escape ladder .....	Apr. 30, 1878	1360	396	13	800
209, 958	Clarke, Alfred, Atlantic City, N. J. Dust-arrester for railway-cars .....	May 28, 1878	990	281	13	968
210, 499	Clarke, Almon, Shelbygan, assignor of one-half interest to Charles A. Spencer, Shelbygan Falls, Wis. Canopy-adjuster for children's carriages .....	Apr. 16, 1878	517	151	13	680
202, 094	Clarke, F. D. W., et al. (See Orphy, John W., assignor.)					
202, 094	Clarke, George C., Cleveland, Ohio. Bale-tie .....	Nov. 19, 1878	471	142	14	751
202, 094	Clarke, George H., Brooklyn, and Charles Van Wagenen, New York, N. Y.; said Van Wagenen assignor to said Clarke. Gate-bar .....	Dec. 3, 1878	112	29	14	836
202, 094	Clarke, George P., New York, N. Y. Cano .....	Apr. 9, 1878	251	74	13	639

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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199, 146	Clarke, George R., Brooklyn, N. Y. Machine for cutting paper.....	Jan. 15, 1878	452	133	13	86
200, 259	Clarke, Henry, Baltimore, Md. Register.....	Feb. 12, 1878	374	{ 110 111 111 }	13	299
203, 707	Same..... same.....	May 14, 1878	505	{ 143 144 }	13	896
202, 031	Clarke, John N. (See Greenwood & Clarke)..... (Reissue.)					
206, 929	Clarke, Joseph W., Neunan, Ga. Seed-cotton cleaner.....	Apr. 30, 1878	1182	341	13	776
190, 795	Clarke, Roselle, assignor to self and John C. Bardale, Austin, Minn. Grain-separator.....	Aug. 13, 1878	296	90	14	246
201, 749	Clarke, William H., Indianapolis, Ind. Organ-stop action.....	Jan. 20, 1878	1124	333	13	209
207, 948	Clarkson, Edward H. N., and William H. H. Kesler, Baltimore, Md. Sash-pulley.....	Mar. 26, 1878	974	208	13	574
207, 949	Clarkson, Frank S., Baltimore County, assignor to Frank B. Sloan, Baltimore, Md. Ash-sifter.....	Sept. 10, 1878	393	118	14	402
	Same..... Bedstead-fastening.....	Sept. 10, 1878	393	119	14	402
206, 089	Clarkson, Samuel, et al. (See Alton, Richard C., assignor.)					
8, 025	Clary, James A. (See Field, George B., assignor.)					
	Clary, John P. (See Clary, Stephen S. and John P.)					
	Clary, Stephen S. and John P., Belton, Tex. Corn and cotton planter.....	July 16, 1878	691	200	14	105
8, 026	Class, William F., assignor to Worswick Manufacturing Company, Cleveland, Ohio. Apparatus for pumping fluids from casks..... (Reissue.)	Jan. 8, 1878	429	126	13	82
208, 295	Same..... same..... (Reissue.)	Jan. 8, 1878	430	126	13	82
210, 099	Claude, Louis G., New York, N. Y., assignor to Christian E. Moller, Hoboken, and George H. Russell, Newark, N. J. Horseshoe-bar.....	Sept. 24, 1878	787	229	14	461
198, 793	Clausen, Christian. (See Lapiere, Alexander N., assignor.)					
202, 150	Clausen, Christian, New York, N. Y. Machine for wiring and flanging.....	Nov. 19, 1878	625	185	14	772
207, 255	Clawson, Clement C., Raleigh, N. C. Tobacco measuring and packing machine.....	Jan. 1, 1878	77	20	13	19
204, 481	Clawson, I. Neal, Philadelphia, Pa. Cigar-lighter.....	Apr. 9, 1878	309	92	13	647
204, 481	Clay, Dow A. (See Holcomb & Clay.)					
204, 292	Clay, Mark W., Oranoco, Minn. Adding-machine.....	Aug. 20, 1878	635	189	14	292
204, 005	Clay, Wilson S., Valparaiso, Nebr. Water-wheel.....	May 28, 1878	1156	330	13	989
208, 569	Clayton, Austin B., Dover, Mo. Gate.....	May 21, 1878	838	239	13	945
203, 420	Clayton, Herbert, Lexington, Ky. Hood for fire-places.....	Oct. 1, 1878	119	34	14	505
210, 184	Clayton, John, Brainerd P. O., Clayton Lake, Minn. Wheel attachment for plows.....	May 7, 1878	192	55	13	847
200, 509	Cleaveland, Wallace W., Marshall, Mich. Current water-wheel.....	Nov. 26, 1878	729	216	14	790
206, 389	Clegg, John, Providence, R. I. Machine for washing wool.....	Feb. 19, 1878	635	187	13	347
204, 481	Clegg, Thomas, Lawrence, Mass. Drying apparatus.....	July 30, 1878	1076	307	14	161
200, 604	Cleland, John W., Nevada, Mo. Wind-engine.....	June 4, 1878	62	21	13	1021
203, 242	Clement, Benjamin F., assignor to Charles H. Buck, jr., Saint Louis, Mo. Door for cooking-stoves.....	Feb. 26, 1878	751	220	13	372
199, 354	Same..... Stove-oven shelf.....	May 7, 1878	5	2	13	821
210, 752	Clement, Nathan S., Northampton, assignor of one-half interest to Rice, Barton & Fales, Machine and Iron Company, Worcester, Mass. Machine for folding and cutting paper.....	Jan. 22, 1878	667	{ 195 196 }	13	128
201, 750	Clements, Charles J., Brooklyn, N. Y. Bed-bottom.....	Dec. 10, 1878	400	109	14	884
	Clements, George S. and Joel Decker, assignors of one-fourth interest to Thomas J. Smith, New Lexington, Ohio. Bed-bottom.....	Mar. 26, 1878	974	298	13	575
210, 186	Clements, John T., et al. (See Caton, Emanuel R., assignor.)					
209, 655	Clemmer, Miles Peterson, Pin Hook, N. C. Flour-bolting machine.....	Nov. 26, 1878	732	217	14	790
200, 977	Clemmons, Alveus J., Chicago, Ill. Water-elevator.....	Nov. 5, 1878	132	38	14	698
200, 231	Clemmons, Andrew Jackson, and Henry Milton Mills, Burdett, Mo. Neck-yoke attachment for wagon tongues.....	Mar. 5, 1878	153	50	13	439
206, 003	Clemons, Everett, Pekin, Ill. Smoke-stack.....	Oct. 22, 1878	804	251	14	621
	Clemons, Hiram Maine, Gold Hill, Nev. Horseshoe.....	July 16, 1878	608	175	14	95
203, 120	Clephone, Lewis, et al. (See Moore, Charles T., assignor.)					
208, 154	Cleveland Axle Manufacturing Company. (See Kritch, Jacob, assignor)..... (Reissue.)					
205, 174	Cleveland Hardware Company. (See Collins, William G., assignor.)					
209, 751	Cleveland, Orestes, Jersey City, N. J. Erasive tablet-holder.....	Apr. 30, 1878	1360	396	13	800
190, 412	Same..... Holder for lead-pencils.....	Sept. 17, 1878	619	183	14	437
202, 994	Cleveland, Riezi L., Durand, Ill. Seed-planter.....	June 25, 1878	811	241	13	1132
208, 960	Cleveland Rolling Mill Company. (See Brightman, Latham, assignor.)					
207, 797	Clewett, William, Reading, Pa. Ice-cream measure and mold.....	Nov. 12, 1878	240	73	14	718
198, 794	Click, Daniel. (See Hunt, John C., assignor.)					
202, 994	Cliff, John W., assignor of one-half interest to L. P. Baker, Buffalo, N. Y. Broom-binder.....	Jan. 22, 1878	725	213	13	137
208, 960	Clifford, Patrick, Cambridgeport, Mass. Rivet.....	Apr. 30, 1878	1240	359	13	784
207, 994	Cline, John C., Philadelphia, Pa. Crucible-machine.....	Oct. 15, 1878	559	163	14	575
207, 345	Cline, Alfred G., Crete, Nebr. Water-wheel.....	Nov. 26, 1878	848	250	14	805
199, 031	Cline, William, jr., Clayton, Ind. Hog-cholera compound.....	Aug. 27, 1878	742	214	14	312
	Clines, Thomas P., Louisville, Ky. Bridle-attachment.....	Jan. 8, 1878	320	94	13	65
207, 797	Clinton, John A. (See Hotchkiss & Clinton.)					
198, 794	Clinton Wire Cloth Company. (See Waters, Charles H., assignor)..... (Reissue.)					
202, 632	Clippinger, David Hicks, Brighton, Cal. Check-rein hook.....	Sept. 10, 1878	229	72	14	381
202, 151	Cloke, William H., Rahway, N. J. Fastening bottoms in boilers.....	Jan. 1, 1878	78	20	13	19
202, 632	Close, John W., Buffalo, N. Y. Railway-switch.....	Apr. 23, 1878	854	{ 245 246 }	13	732
202, 151	Close, Philip Charles, Augusta, Ga. Shutter-worker.....	Apr. 9, 1878	311	92	13	647
210, 838	Close, Thomas J., Philadelphia, Pa. Hatchway-door mechanism.....	Dec. 17, 1878	494	140	14	906
200, 605	Close, Walter R., Bangor, Me. Mold for freezing water.....	Feb. 26, 1878	751	220	13	372
202, 993	Closser, Sylvanus M., assignor of one-half interest to John A. Cutler, La Porte, Ind. Shoe box and drawer.....	Apr. 30, 1878	1240	358	13	784
203, 323	Closson, William B., Boston, Mass. Finger-ring.....	May 7, 1878	95	27	13	832
200, 173	Closterman, Henry, Cincinnati, Ohio. Library-table.....	Feb. 12, 1878	293	87	13	286
204, 423	Closterman, Henry, jr. (See Heilbrun, Alexander, assignor.)					
206, 930	Closterman, Henry, jr., Cincinnati, Ohio. Folding chair.....	June 4, 1878	8	3	13	1014
201, 868	Clotworthy, William P., Philadelphia, Pa. Baking-powder.....	Aug. 13, 1878	296	90	14	246
206, 663	Cloud, Benjamin F., Philadelphia, Pa. Device for transmitting and arresting motion.....	Apr. 2, 1878	11	3	13	600
199, 263	Clough, Aaron S., Meredith, N. H. Grain-sieve.....	Aug. 6, 1878	6	2	14	207
	Clough, Jefferson M., and William K. Jenne, Ilion, assignors to Type Writer Company, New York, N. Y. Type-writing machine.....	Jan. 15, 1878	563	{ 165 166 }	13	104
210, 500	Clough, Joseph, Providence, R. I. Barber's chair.....	Dec. 3, 1878	113	29	14	838
209, 549	Clough, Morton M., Marlborough, Mass. Machine for skiving leather.....	Oct. 15, 1878	558	163	14	574
209, 549	Clough, Willard, Oshkosh, Wis. Pump.....	Nov. 5, 1878	12	4	11	687
209, 549	Clouse, Joseph N., and Barnard Zipfel, Toledo, Ohio. Fastening device for shoes, &c.....	Nov. 19, 1878	530	159	14	759
209, 549	Cloutman, Charles L., assignor to self and Alonzo I. Nute, Farmington, N. H. Car-coupling.....	Nov. 5, 1878	133	39	14	689
208, 672	Clover, Philip K., Columbus, Ohio. Coffin-terpedo.....	Oct. 8, 1878	231	66	14	527
	Clow, Charles. (See Naumier, Mathias, assignor.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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267, 164	Clow, George E., Seymour, Ind. Scythe-snath fastening .....	Aug. 20, 1878	537	161	14	280
267, 346	Clow, Winfield S., Allegheny, Pa. Toy .....	Aug. 27, 1878	743	221	14	312
199, 032	Clowes, Joseph, Bedford, Pa. Envelope .....	Jan. 8, 1878	321	94	13	65
206, 091	Cloyd, Henry C., West Alexandria, Ohio. Boring-machine .....	July 16, 1878	694	200	14	106
200, 029	Cloyd, John V., Whitley Court-House, Ky. Corn-planter .....	Feb. 5, 1878	133	44	13	254
210, 917	Cluett, Brother & Co., George B. (See Greenidge, Rupert, assignor.) Clum, Henry A., Elmira, N. Y. Portable closet or commode .....	Dec. 17, 1878	602	106	14	919
202, 633	Clute, John, <i>et al.</i> (See Carr, William H., assignor.) (Reissue.) Clute, Nicholas, Schenectady, N. Y. Double-acting suction and force pump .....	Apr. 23, 1878	856	246	13	732
	Clymer, Daniel R. (See Rolland & Baradel, assignors.) Coachman, John W. (See Antunes José Antonio, assignor.)					
201, 499	Coast, Joseph, Hammonont, N. J. Digging-machine .....	Mar. 19, 1878	707	{ 215 216 }	13	532
210, 669	Coates, William B., Philadelphia, Pa. Crank-handle .....	Dec. 10, 1878	314	86	14	873
199, 185	Coats, Hiram A., Wellsville, N. Y. Canceling-stamp .....	Jan. 15, 1878	493	145	13	93
209, 550	Cobb, George F., Boston, Mass. Stove .....	Nov. 5, 1878	13	4	14	683
204, 884	Cobb, John J., Grand Rapids, Mich. Sleigh .....	June 18, 1878	507	148	13	1086
209, 327	Cobb, Samuel C., assignor to Harris Manufacturing Company, Janesville, Wis. Harvester-rake .....	Oct. 29, 1878	968	282	14	638
198, 930	Cobb, Zenas, Chicago, Ill. Fastening for seat-springs .....	Jan. 8, 1878	221	62	13	50
201, 500	Same. Door-spring .....	Mar. 19, 1878	708	216	13	532
	Coburn, Charles E., <i>et al.</i> (See Stevens, John L. and George W., assignors.) (Reissue.) Coburn, George M. (See Boynton, Coburn & Carver.)					
205, 354	Cochran, Henry S., Philadelphia, Pa. Weighing-scale .....	June 25, 1878	1005	{ 297 298 }	13	1157
	Cochran, James E. (See Pimm & Hull, assignors.) (Reissue.) Cochran, Joseph L. (See Bains, James, assignor.) Cochrane Brothers. (See Cochrane, John, assignor.)					
203, 708	Cochrane, John, New York, N. Y., assignor to Cochrane Brothers, Farmingdale, N. J. Stay-bolt trimmer .....	May 14, 1878	508	145	13	896
204, 200	Cock, Andrew C., Saint Louis, Mo. Operating boiler-brooms .....	May 28, 1878	1067	304	13	978
8, 372	Codd, Hiram, assignor to self and Richard Barrett, Camberwell, England. Bottle and bottle-stopper .....	Aug. 13, 1878	464	140	14	267
203, 243	Codd, Hiram, Camberwell, assignor of one-half interest to Richard Barrett, London, England. Apparatus for filling bottles .....	May 7, 1878	7	3	13	822
199, 413	Codding, James H., Taunton, Mass. Sink-trap .....	Jan. 22, 1878	726	213	13	137
	Codman & Shurtleff. (See Jennison, Charles R., assignor.)					
199, 264	Cody, John T., Cincinnati, Ohio. Metallic neck for glass vessels .....	Jan. 15, 1878	569	164	13	104
206, 390	Coe, Calvin J., assignor to self and John Pfister, Lowville, N. Y. Jail-bar .....	July 30, 1878	1078	308	14	161
210, 753	Coe, Charles E., Elmwood, Ill. Corn-planter .....	Dec. 10, 1878	401	109	14	884
	Coe, Edward D. (See Yonge, Robert G., assignor.) Coe, Frederick W. (See Willard, Hosea, assignor.)					
8, 146	Coester, Charles, jr., and James L. Moore, assignors, by mesne assignments, to Frank Armstrong, Bridgeport, Conn. Garter .....	Mar. 26, 1878	1113	336	13	594
205, 054	Coffee, George Holland, assignor of one-half interest to J. B. Wenger, Gainesville, Mo. Nut-lock .....	June 18, 1878	676	198	13	1108
207, 593	Coffey, John W., Washington, Iowa. Barber's chair .....	Sept. 3, 1878	9	4	14	350
200, 174	Coffin & Co., Thomas. (See Coffin, Thomas, assignor.) Coffin, Joseph N., assignor to self and George W. Bond, Biddeford, Me. Bearer for harness collars and breeching .....	Feb. 12, 1878	293	87	13	286
209, 606	Coffin, Thomas, Baldwin Township, Allegheny County, assignor to Thomas Coffin & Co., Pittsburg, Pa. Glass-house pot .....	Nov. 5, 1878	74	21	14	690
208, 225	Coffits, John, Central City, Iowa. Farm-gate .....	Sept. 24, 1878	708	208	14	452
206, 664	Coffman, William H., and Nathaniel Havens, Carroll, Ohio. Sash-fastener .....	Aug. 6, 1878	7	3	14	207
	Cofran, G. W., <i>et al.</i> (See Trezise, Thomas, assignor.) Coggeshall, Oliver P. (See Eddy & Coggeshall.)					
8, 151	Cogswell, Ira, jr., Englewood, Ill., assignor, by mesne assignments, to O. B. North & Co., New Haven, Conn. Carriage-top .....	Apr. 2, 1878	233	68	13	632
199, 265	Cogswell, Ira, Chicago, Ill. Sash-fastener .....	Jan. 15, 1878	570	166	13	104
205, 476	Cogswell, Mortimer C., Brooklyn, and William H. Finn, Oswego, N. Y. Flour-bolt .....	July 2, 1878	12	4	14	10
	Cohen, Jacob. (See Cohen, Louis P., assignor.) Same. (See Thompson, George W., assignor.)					
205, 527	Cohen, Julius, <i>et al.</i> (See Dette, H. J. Lewis, assignor.) Cohen, Louis P., assignor to Jacob Cohen, New York, N. Y. Machine for cutting paper .....	July 2, 1878	66	19	14	17
204, 714	Cohen, Solomon L. (See Müller, Hermann, assignor.) Cohn, Harris, Delhi, N. Y. Drawer .....	June 11, 1878	300	93	13	1058
8, 290	Colahan, Charles, Cleveland, Ohio. Harvester .....	June 18, 1878	797	236	13	1125
198, 735	Same. Grain-binder .....	Jan. 1, 1878	3	1	13	9
201, 993	Same. Same .....	Apr. 2, 1878	130	38	13	618
203, 590	Colborn, Abram, <i>et al.</i> (See Smith, George F., assignor.) (Reissue.) Colborne, Levi H., assignor of one-half interest to George H. Beach, New York, N. Y. Sewer-pipe stretch-trap .....	May 14, 1878	389	110	13	882
203, 244	Colbrook, Charles H., assignor of part interest to William Whitworth and Moses W. Wheeler, Millbury, and Jonathan Luther, Worcester, Mass. Winding-on regulators for spinning mules and jacks .....	May 7, 1878	8	3, 4	13	822
204, 293	Colburn, Adoniram J., Greenville, Mich. Lumber-rule .....	May 28, 1878	1158	331	13	990
	Colburn, Henry J. (See Goodrich & Colburn.) (Reissue.) Colburn, Richard R. (See Arthur, Charles M., assignor.)					
201, 389	Colby, Warren H. (See Colby, William H. and Warren H.) Colby, William H. and Warren H., Merrimacport, Mass. Side-bar wagon .....	Mar. 19, 1878	599	184	13	517
	Coldwell, John H. (See Overin & Coldwell.) Cole Brothers. (See Keiser, Andrew, assignor.)					
205, 055	Cole, Charles, Ottawa, Ontario, Canada. Device for converting motion .....	June 18, 1878	677	198	13	1109
209, 657	Cole & Co., R. F. (See Bresnan, Patrick, assignor.) Cole, David S., Washington, assignor of one-half interest to Samuel A. Hyers, Davenport, Iowa. Draft-equalizer .....	Nov. 5, 1878	134	39	14	699
202, 996	Cole, Eli. (See Howell & Cole.) Cole, Emerson, Brooklyn, N. Y. Bung-fastener .....	Apr. 30, 1878	1243	359	13	785
207, 347	Cole, George O., Hillsdale, N. J. Fruit-box .....	Aug. 27, 1878	743	222	14	312
209, 864	Same. Fruit vander's dish .....	Nov. 12, 1878	361	108	14	733
200, 510	Cole, H. Harrison, Philadelphia, Pa. Twin hook .....	Feb. 19, 1878	636	187	13	347
200, 696	Cole, Henry James, London, England. Apparatus for cleaning hulls of vessels, &c .....	Feb. 26, 1878	847	249	13	386
205, 355	Cole, Isaac L., Hillsdale, N. J. Basket .....	June 25, 1878	1007	298	13	1157
206, 863	Cole, Jonathan P., Hartford (English P. O.), Ind. Hog-cholera compound .....	Aug. 13, 1878	223		14	239
202, 410	Cole, Mooers, Lowell, Mass. Curry-comb .....	Apr. 16, 1878	595	175	13	691



*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and occupation.	Date.	Monthly volume.		Official Gazette.	
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198, 795	Cole, Samuel, Stoneham, Mass. Sash-fastener .....	Jan. 1, 1878	78	21	13	19
203, 421	Cole, Sherman M., Anamosa, Iowa. Pump .....	May 7, 1878	193	56	13	847
206, 773	Cole, William A., assignor of one-half interest to D. R. Payne, Pickwick, Pa. Low-water indicator .....	Aug. 6, 1878	119	37	14	221
199, 692	Cole, William R., Detroit, Mich. Damper-regulator for steam-boiler furnaces .....	Jan. 29, 1878	1037	302 303	13	194
206, 421	Coleman, Abner, Lexington, Ohio. Drying apparatus for fruits, &c .....	July 30, 1878	1111	318	14	165
201, 809	Coleman, Ambrose B., Lyndonville, N. Y. Double harness .....	Apr. 2, 1878	12	3	13	600
200, 175	Coleman, Charles Carson, Honolulu, Hawaiian Islands. Pipe-wrench .....	Feb. 12, 1878	294	87	13	287
200, 511	Coleman, Cornelius C., Branford, Conn., assignor to Thomas Kennedy, New York, N. Y. Cylinder-lock .....	Feb. 19, 1878	637	187	13	347
200, 512	Coleman, Cornelius C., assignor to Branford Lock Works, Branford, Conn. Extension-key .....	Feb. 19, 1878	637	187	13	347
205, 056	Coleman, H. Dudley, New Orleans, La. Baling-press .....	June 18, 1878	677	199	13	1109
199, 960	Coleman, Hamilton Dudley, New Orleans, La. Millstone-pick .....	Feb. 5, 1878	70	22	13	244
205, 614	Coleman, John H., New York, N. Y. Case for carboys .....	July 2, 1878	153	46	14	29
205, 477	Coleman, Joseph James. (See Bell & Coleman.) .....	July 2, 1878	13	5	14	10
210, 839	Coles, Erskine A., Philadelphia, Pa., assignor of two-thirds interest to George R. Hill and George H. Smith, Alexandria, Va. Soft-cake machine .....	Dec. 17, 1878	495	140 141	14	906
208, 714	Colie, George W., Buffalo, N. Y. Rocking-chair .....	Oct. 8, 1878	277	78	14	533
	Coll, Bernard. (See Miller & Coll.) .....					
	Collender, H. W. (See Boyle, James E., assignor.) .....					
8, 132	Collender, Hugh W. (See Boyle, James E., assignor.) .....					
8, 133	Collender, Hugh W., New York, N. Y. Billiard-table cushion .....	Mar. 19, 1878	813	248	13	546
203, 422	Same. Billiard-cushion .....	Mar. 19, 1878	814	248	13	546
202, 977	Same. Game-counter for billiard-tables .....	May 7, 1878	194	56	13	847
202, 153	Collet, John W., Upper Alton, Ill. Step-box for shafts or spindles .....	Apr. 30, 1878	1244	360	13	785
202, 032	Collier, Frederick M., assignor of one-half interest to Oliver L. Thomas II., and Samuel H. Roberts, Boston, Mass. Wire-rope harness-trace .....	Apr. 9, 1878	313	93	13	648
199, 604	Collier, Henry C., Clarksville, Ark. Hog-cholera compound .....	Apr. 30, 1878	1183		13	777
206, 422	Collier, Orrin, assignor of one-half interest to Chester J. Lane, Sacramento, Cal. Check-valve for bib-cocks and faucets .....	Jan. 29, 1878	1039	303	13	194
201, 912	Collier, William B., San Diego, Cal. Camp-stove .....	July 30, 1878	1113	318	14	165
204, 201	Collignon, Adam, Westwood, N. J. Reclining-chair .....	Apr. 2, 1878	54	14	13	606
208, 704	Collinge, Alexander J., and Brigham M. Savage, Independence, Iowa. Steam-generator .....	May 28, 1878	1068	304	13	978
205, 947	Collins, Aid, New Vienna, Ohio. Device for removing dirt, &c., from steam-boilers .....	Oct. 8, 1878	365	104	14	545
202, 330	Collins, Cornelius, jr., Kingsland, and George Thomas, Jersey City, assignors of one-third interest to Claude M. Gignoux, Morristown, N. J. Hasp-lock .....	July 16, 1878	548	156	14	87
208, 715	Collins, Edward H., Denver, Colo. Canvas-stretcher .....	Apr. 16, 1878	518	152	13	680
208, 372	Collins, Frederick K., Butler, Ind. Automatic pan .....	Oct. 8, 1878	278	79	14	533
209, 461	Collins, Giles H., Wayne, Mich. Thill-coupling .....	Sept. 24, 1878	864	251	14	470
	Same. Anti-rattler for thill-coupling .....	Oct. 29, 1878	1108	322	14	650
199, 796	Collins, H. W. (See Penn, Edward J., assignor.) .....					
205, 786	Collins, John W., Baltimore, Md. Combined calendar and clamp .....	Jan. 29, 1878	1135	333	13	209
202, 791	Collins, John W., Washington, D. C. Hot-air register .....	July 9, 1878	364	105	14	58
	Collins, Michael W., and C. Frank Boughton, Brooklyn, N. Y. Implement for holding and operating oil-cans .....	Apr. 23, 1878	1017	292	13	752
208, 888	Collins, W. C. (See Wardwell, E. Schuyler, assignor.) .....					
204, 540	Collins, William G., assignor to Cleveland Hardware Company, Cleveland, Ohio. Metal-shears .....	Oct. 15, 1878	477	137	14	504
200, 513	Collins, Wright L., Louisville, Ky. Automatic wagon-brake .....	June 4, 1878	109	37	13	1028
203, 534	Collman, John and John, jr., Cedar Rapids, Iowa. Nut-lock .....	Feb. 19, 1878	638	188	13	347
202, 995	Collmann, Alfred, Vienna, Austria. Valve-gear for engines .....	May 14, 1878	334	95	13	875
201, 994	Collom, John, Golden, Colo. Ore-separator .....	Apr. 30, 1878	1241	359	13	784
	Collyer, Charles W., assignor of two-thirds interest to Lyman A. May and A. Edwin Withney, Lynn, Mass. Scam-pressing mechanism .....	Apr. 2, 1878	131	38	13	618
200, 176	Colony, Charles W., Sandy Creek, N. Y. Lantern .....	Feb. 12, 1878	294	88	13	267
	Colony, Frank H. (See Pettengill, Asa, assignor.) .....					
203, 889	Coltman, Robert, et al. (See Caton, Emanuel R., assignor.) .....					
199, 603	Colton, Sabin W., Philadelphia, Pa. Station-indicator .....	May 21, 1878	706	202	13	929
202, 792	Colvin, Margaret Plunkett, Battle Creek, Mich. Clothes-pounder .....	Jan. 29, 1878	1038	303	13	194
203, 890	Same. same .....	Apr. 23, 1878	1018	292	13	752
210, 070	Colvin, Orson, Schoolcraft, Mich. Bee-hive .....	May 21, 1878	707	202	13	929
	Colvin, Stephen, and Horatio A. Remington, River Point, R. I. Loom .....	Dec. 10, 1878	315	86	14	873
209, 023	Colwell, Robert, et al. (See Shoots, James D., assignor.) .....					
209, 659	Coman, Darius, Delevan, Minn. Washing-machine .....	Oct. 15, 1878	627	181	14	583
206, 539	Combes, Wilber M., Auburn, N. Y. Steam-feed cooker .....	Nov. 5, 1878	137	40	14	699
207, 504	Combs, Abel, Philadelphia, Pa. Metallic top for burner-globes .....	July 30, 1878	1234	355	14	180
	Combs, John M., La Cueva, N. Mex. Work-bench attachment .....	Aug. 27, 1878	905	267	14	331
206, 931	Comerford, Michael M. (See Maxwell, James M., assignor.) .....					
	Comey, Frank E., assignor of one-half interest to John A. Rupert, Pawtucket, R. I. Button .....	Aug. 13, 1878	297	91	14	247
200, 979	Comey, Willard, et al. (See Crisp, Joseph E., assignor.) .....					
	Comey, Willard, Westborough, Mass. Machine for treecing boots and shoes .....	Mar. 5, 1878	154	50, 51	13	439
208, 570	Comfort, Ezra. (See Brodie & Comfort.) .....					
209, 658	Comly, Eli B., and William C. Brown, Logan, Ohio. Barrel-cover .....	Oct. 1, 1878	120	34	14	505
207, 015	Comly, James F., New Lexington, Ohio. Registering tape-measure .....	Nov. 5, 1878	135	39	14	699
200, 177	Compton, James, La Belle, Mo. Hydrant for watering stock .....	Aug. 13, 1878	376	115	14	256
200, 643	Comstock, Austin W., Mount Pleasant, Iowa. Weather-strip .....	Feb. 12, 1878	295	88	13	287
201, 502	Same. Neck-yoke fastener .....	Feb. 26, 1878	791	232	13	378
208, 795	Comstock, Austin W., Mount Pleasant, assignor of one-half interest to J. M. C. Swinford, Henry County, Iowa. Lifting-jack and tire-tightener .....	Mar. 19, 1878	711	216	13	533
200, 896	Comstock, Austin W., and Robert A. Wallace, Mount Pleasant, Iowa. Iron fence-post .....	Oct. 8, 1878	366	104	14	545
	Comstock, Benjamin F., Lincoln, Ill. Washing-machine .....	Mar. 5, 1878	79	28	13	427
204, 424	Conant, Charles Wright. (See Wilder & Conant.) .....					
205, 528	Conarro, Robert, assignor of one-half interest to D. W. Pratt, Belleville, Ill. Harvester .....	June 4, 1878	9	4	13	1014
209, 690	Conaway, Henry O., Deep River, Iowa. Collar .....	July 2, 1878	68	20	14	17
	Condict, John Elliot, and Albert J. Doty, Philadelphia, Pa.: said Doty assignor to said Condict. Fire extinguishing apparatus .....					
204, 006	Condict, Nathan W., jr., Jersey City, N. J. Portable railway-track .....	Nov. 5, 1878	137	40	14	699
204, 097	Same. Portable railway .....	May 21, 1878	839	240	13	945
		May 21, 1878	840	240	13	945

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200, 697	Condon, William F., assignor of one-half interest to Ernst Wetzel, William E. Gardner, David Cresser, and E. J. Clark, Zilwaukee, Mich. Self-extinguishing stove.	Feb. 26, 1878	848	240	13	886
210, 918	Condon, William F., Zilwaukee, Mich. Self-extinguishing stove.	Dec. 17, 1878	603	167	14	919
203, 592	Cone, Albert. (See Marble, Albert, assignor.)					
210, 671	Congdon, Isaac Hopkins, Omaha, Nebr. Locomotive smoke-stack.	May 14, 1878	392	111	13	882
208, 932	Congdon, Isaac H., Omaha, Nebr. Car-wheel.	Dec. 10, 1878	817	87	14	874
208, 466	Conkle, Francis A., Philadelphia, Pa. Casing-head for oil-wells.	Aug. 13, 1878	298	91	14	247
206, 774	Conklin, Edward, Channahon, Ill. Weather-strip.	Oct. 1, 1878	14	4	14	490
210, 754	Conklin, Nathaniel A., Brooklyn, N. Y. Thread-tension for sewing-machines.	Aug. 6, 1878	120	38	14	221
200, 698	Conklin, Solon, Kirkwood, assignor of one-half interest to B. S. Clark, New York, N. Y. Truss-bridge.	Dec. 10, 1878	402	110	14	884
199, 267	Conkling, Charles Gurdon, Hopewell, Pa. Wagon-box fastening.	Feb. 26, 1878	849	250	13	387
	Conkling, John P., Saratoga Springs, assignor to New York Ore Separating Company, New York, N. Y. Apparatus for collecting dust from ore-separators, &c.	Jan. 15, 1878	571	107	13	104
	Conkling, P. (See Thompson, Charles H., assignor.)					
199, 414	Conkling, Stoddard D., et al. (See Shoots, James D., assignor.) (Reissue.)	Jan. 22, 1878	726	214	13	137
208, 571	Conley, Francis Clark, Ralston, Pa. Car-stove.					
199, 516	Conley, John, Saint Joseph, assignor, by mesne assignments, to L. V. Moulton, Grand Rapids, Mich. Pitman-joint.	Oct. 1, 1878	120	35	14	505
210, 011	Conn, Charles G., and Eugene Dupont, Elkhart, Ind. Cornet.	Jan. 22, 1878	827	242	13	153
210, 160	Connell, James M., Newark, Ohio. Harvester-knife sharpener.	Nov. 19, 1878	531	159	14	759
200, 434	Connell, John, Rochester, N. Y. Circular sawing machine.	Nov. 19, 1878	626	186	14	772
209, 380	Connell, John P. (See Johnson, Joseph W., assignor.)					
203, 121	Connell, Timothy J., Merrimac, Mass. Brush.	Feb. 19, 1878	564	160	13	336
204, 867	Connolly, Austin, Hoboken, assignor to self and John V. Smith, Elizabethport, N. J. Faucet and bushing.	Oct. 20, 1878	1025	208	14	640
208, 374	Connolly, James T., and Henry C. Huston, Connellsville, Pa. Spark-arrester.	Apr. 30, 1878	1361	306	13	800
208, 375	Connolly, Joseph H., and Thomas E., assignors to selves and Charles Lockhart, Pittsburgh, Pa. Device for extinguishing fire in oil-tanks and similar places.	June 18, 1878	511	149	13	1067
208, 376	Connolly, Martin. (See Spielman, William, assignor.)	Sept. 24, 1878	865	252	14	471
200, 609	Connolly, Thomas C. (See Connolly, Joseph H. and Thomas E.)	Sept. 24, 1878	866	252	14	471
208, 005	Connolly, Thomas Edward, New Brighton, Pa. Fire-extinguisher.	Feb. 26, 1878	850	250	13	397
200, 854	Connor, Charles K., Camp Point, Ill. Corn-harvester.	Sept. 10, 1878	453	136	14	410
202, 634	Connor, Joseph, Philadelphia, Pa. Car-axle box-lid.	Mar. 5, 1878	40	15	13	421
206, 775	Connor, Samuel, assignor of one-half interest to Joseph G. Stewart, Washington, Iowa. Clothes-line tightener.	Apr. 23, 1878	857	246	13	732
201, 906	Connet, Matthew F., Deval's Bluff, Ark. Machine for sawing shingles.	Aug. 6, 1878	121	38	14	222
202, 793	Connolly, Patrick, Brooklyn, N. Y. Stop-cock and box for water-pipes.	Apr. 2, 1878	134	39	13	618
206, 228	Same. Hydrant.	Apr. 23, 1878	1010	203	13	752
	Same. Locking-valve.	July 23, 1878	869	248	14	131
210, 755	Connolly, Philip. (See Smith & Connolly.)					
	Connolly, Thomas. (See Thomson & Connolly.)					
200, 978	Connor, John, Jersey City, N. J. Lock-work attachment for clocks.	Dec. 10, 1878	403	110	14	884
208, 467	Connor, Miles J. (See Graham, Robert J. S., assignor.)					
210, 240	Conover, G. H., et al. (See Waite, William T., assignor.)					
202, 635	Conover, George, New Haven, Conn., assignor of one-half interest to Michael Foth, New York, N. Y. Fastening-plate for shoe-buttons.	Mar. 5, 1878	154	50	13	439
201, 910	Conover, George, New Haven, Conn. Scissors.	Oct. 1, 1878	15	4	14	490
201, 995	Conover, J. F., et al. (See Waite, William T., assignor.)					
204, 202	Conrad, Carl, Saint Louis, Mo. Box or carrier for bottled liquors.	Nov. 26, 1878	787	233	14	797
208, 373	Conrad, Charles, Genoa, Mich. Compound rail.	Apr. 23, 1878	858	247	13	732
210, 012	Conrad, Eli, Marysville, Ohio. Attachment for wood-working machinery.	Dec. 17, 1878	605	107	14	918
202, 411	Conrad, John, Burlington, Iowa. Heater for sad-irons.	Apr. 2, 1878	139	38	13	618
208, 373	Conrad, Samuel A., Terre Haute, Ind. Preparing iron for case or surface hardening.	May 28, 1878	1060		13	979
	Conradt, Augustus, assignor to Middletown Plate Company, Middletown, Conn. Jewel-casket.	Sept. 24, 1878	864	252	14	471
210, 870	Same.	Nov. 19, 1878	632	160	14	759
202, 135	Conradt, Isaac, Utica, N. Y. Safety-tap for casks.	Apr. 2, 1878	13	4	13	600
200, 897	Conradt, John, Salamanca, N. Y. Curtain-stretcher.	Apr. 16, 1878	595	175	13	691
	Conser, Eli P., Monticello, Iowa. Revolving box-churn and device for operating the same.	Mar. 5, 1878	80	28	13	427
206, 229	Consolidated Wax Thread Sewing Machine Company. (See Bean, Edwin C., assignor.)					
203, 591	Constable, William. (See Dunbar, Peter, assignor.)					
	Constant, Boston S., Denver, Ind. Grain-separator.	July 23, 1878	871	248	14	131
204, 136	Converse, Bolivar C., Springfield, Ohio. Tool for trimming and finishing the edges of dash-boards.	May 14, 1878	390	110	13	882
	Same. Manufacture of metal tubing.	May 28, 1878	992	282	13	909
210, 187	Converse, Edmund. (See Dryden, George, assignor.)					
8, 435	Converse, Ephraim K., et al. (See Mudge, Carson, assignor.)					
204, 135	Converse, Morton E., Rindge, N. H. Table.	Nov. 26, 1878	733	218	14	790
199, 266	Converse, Paschal. (See Lane, Frederic A., assignor.)					
202, 331	Converso, Susan Taylor, Woburn, Mass. Under-clothing. (Reissue.)	Sept. 24, 1878	966	282	14	483
202, 798	Convery, Peter J., Brooklyn, N. Y. Sewer-trap valve.	May 28, 1878	901	282	13	969
203, 891	Conway, Frederick, Buffalo, N. Y. Attaching device for harness-straps.	Jan. 15, 1878	570	166	13	104
208, 515	Conway, J. N. (See Burgess, Benjamin, assignor.)					
	Conway, John A., Toledo, Ohio. Artificial irrigation.	Apr. 16, 1878	518	152	13	680
	Same. Flower-pot.	Nov. 12, 1878	203	87	14	724
	Conway, Joseph Lunham, Bellefontaine, Mo. Bag-holder.	May 21, 1878	708	202	13	920
210, 501	Conway, William B., and Wallace A. Heald, Indianapolis, Ind. Machine for bending chain-links.	Oct. 1, 1878	58	18	14	497
	Conway, William B., assignor to Charles H. Miller, Blacksburg, and Lorentz & Sullivan, Christiansburg, Va. Cigar-perforator and match-box.	Dec. 3, 1878	115	30	14	839
8, 341	Cook, Albert G. (See Grant & Cook.)					
199, 517	Cook, Daniel M., Mansfield, Ohio. Process and apparatus for evaporating and defecating cane-juice. (Reissue.)	July 23, 1878	1050	304	14	154
204, 951	Cook, E. C., et al. (See Smith, William, assignor.)					
204, 644	Cook, Elbert P., and James F. Hall, Havana, N. Y. Vise.	Jan. 22, 1878	820	242	13	158
207, 950	Cook, Emanuel, assignor to self and Jacob R. Cook, Oglethorpe, Ga. Cotton-condenser.	June 18, 1878	570	168	13	1005
	Cook, Ferdinand, New Orleans, La. Bale-tie.	Feb. 26, 1878	791	233	13	378
	Cook, Francis L., Fairfield, Iowa. Bevel.	Sept. 10, 1878	394	119	14	402

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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200, 700	Cook, Frederic. (See Shaw & Cook.)					
201, 751	Cook, Frederic, New Orleans, La., and Henry Shaw, Waveland, Miss. Bale-tie .....	Feb. 26, 1878	851	251	13	351
	Cook, Frederic, New Orleans, La. Bale-tie .....	Mar. 26, 1878	975	298	13	575
	Cook, George W. D., et al. (See Rogers & Tuttle, assignors.)					
	Cook, Isaac. (See Allen & Cook.)					
209, 862	Cook, Jacob R. (See Cook, Emanuel, assignor.)					
206, 165	Cook, John, Kirkwood, Ill. Wind-engine .....	Nov. 12, 1878	359	107	14	723
	Cook, Leroy, Worcester, Mass. Skate .....	July 23, 1878	799	229	14	122
210, 502	Cook, Lorenzo D. (See Knowlton, Henry, assignor.)					
207, 916	Cook, Nathan B., Chicago, Ill. Oar and oar-lock .....	Dec. 3, 1878	116	30	14	839
	Cook, Rufus, West Newton, Mass. Garbage-holder .....	Aug. 13, 1878	377	116	14	256
200, 130	Cook, Ruth A. (See Sheffield, George V., assignor.) (Reissue.)					
	Cook, Samuel M., Boston, Mass. Joining sheet-metal to wire-cloth for the construction of fly-traps, &c. ....	Feb. 12, 1878	248	75	13	280
204, 294	Cook, William, and Samuel Hill, Redditch, England. Needle-bars for sewing-machines.	May 28, 1878	1159	331	13	990
	Cook, William H. (See Terrass, John, assignor.)					
199, 618	Cook, William P., New Garden, Ind. Stove-pipe adjuster .....	Jan. 29, 1878	963	280	13	182
198, 763	Cook, Zenas, Ingersoll, Mich. Bench-dog .....	Jan. 1, 1878	41	10	13	14
209, 863	Cooke, Daniel E., Brantford, Ontario, Canada, assignor, by mesne assignment, of one-half interest to Robert Grigor. Window .....	Nov. 12, 1878	360	108	14	753
205, 356	Cooke, John T., Brooklyn, N. Y. Compound for coating roasted coffee .....	June 25, 1878	1007		13	1157
210, 241	Cooke, Matthew and Robert John, Sacramento, Cal. Fruit and packing-box .....	Nov. 26, 1878	788	234	14	797
210, 242	Same Box-fastener .....	Nov. 26, 1878	789	234	14	797
202, 152	Cooke, Osborn R., Chicago, Ill. Sash-fastener .....	Apr. 9, 1878	311	93	13	648
202, 154	Same .....	Apr. 9, 1878	314	93	13	648
201, 997	Cooke, Robert John. (See Cooke, Matthew and Robert John.)					
201, 998	Cooke, Watts, Paterson, N. J. Portable derrick .....	Apr. 2, 1878	134	39	13	618
198, 838	Same .....	Apr. 2, 1878	136	39	13	618
209, 110	Cooksey, Nicolas B., Clay City, Ill. Gate .....	Jan. 1, 1878	116	33	13	27
208, 155	Cookson, Charles, Wright's Grove, Ill. Lowering attachment to hydraulic elevators.	Oct. 22, 1878	739	214	14	604
205, 175	Cooley, George W., Minneapolis, Minn. Truss for bridges .....	Sept. 17, 1878	620	183	14	437
206, 425	Cooley, Orville, assignor to Johnston Harvester Company, Brockport, N. Y. Harvester-rake .....	June 25, 1878	813	241	13	1132
202, 998	Cooley, Orville, Myron M. Oliver, Brockport, and Stephen E. Sherwood, Conesus, assignors to Johnston Harvester Company, Brockport, N. Y. Harvester .....	July 30, 1878	1116	320	14	106
	Cooley, Rufus R., and Alba W. A. Winsor, Williamantic, Conn.; said Winsor assignor to said Cooley. Scaffold-bracket fastening .....	Apr. 30, 1878	1244	360	13	785
	Coolidge, Austin J. (See Rouse, John H., assignor.)					
	Coolidge, Clinton W. (See Warren & Coolidge.)					
	Coombes, Joseph A., et al. (See Moody, Henry S., assignor.)					
208, 889	Coon, John Dennis, Centreville, Colo. Breech-loading fire-arm .....	Oct. 15, 1878	478	137	14	564
202, 155	Cooney, Patrick H., Erie, Pa. Combined wash-bench and wringer .....	Apr. 9, 1878	316	93	13	648
199, 797	Coonley, John C., and Thomas T. Graham, Chicago, Ill.; said Graham assignor to said Coonley. Tumbling-barrel .....	Jan. 29, 1878	1136	333	13	209
209, 381	Cooper, Almond F., Cambridge, Mass. Vehicle-axle box .....	Oct. 29, 1878	1026	298	14	646
204, 886	Cooper, Arthur, Darnall, England. Utilizing heat from Bessemer converters .....	June 18, 1878	509	149	13	1086
	Cooper, Charles. (See Tiffany, Eli, assignor.)					
	Cooper, Charles G., et al. (See Rogers, George, assignor.) (Reissue.)					
207, 165	Cooper, Daniel M., Dublin, Ind. Fire-engine .....	Aug. 20, 1878	537	161	14	280
200, 435	Cooper, Drury F., New York, N. Y. Vehicle-spring .....	Feb. 19, 1878	565	166	13	338
209, 462	Cooper, Gage M., Port Huron, Mich. Freight-car door .....	Oct. 29, 1878	1109	322	14	659
204, 539	Cooper, George B. F., New Albany, Ind., assignor of six-ninths interest to R. Lee Mannen, N. W. Queen, and Joseph Pettus, Louisville, Ky. Fine-cut-tobacco machine .....	June 4, 1878	108	36, 37	13	1023
	Cooper, Herbert Warren. (See Schmitz & Cooper.)					
199, 961	Cooper, James G. (See Hardie, James & Cooper.)					
201, 913	Cooper, James G., Brooklyn, N. Y. Steam-engine .....	Feb. 5, 1878	71	23	13	244
205, 529	Cooper, John William, Salem, Ind. Alcohol-lamp .....	Apr. 2, 1878	55	14	13	608
199, 186	Cooper, Leonard Arnold, Winthrop, Mo. Corn planter, marker, and cultivator .....	July 2, 1878	69	20	14	13
	Cooper, Nelson B., Dunroith, Ind. Hay-rack .....	Jan. 15, 1878	493	145	13	93
	Cooper, Peter. (See Rogers, Thomas B., jr., assignor.)					
	Cooper, W. A., et al. (See Obernetter, Johann Baptist, assignor.)					
	Cope, Allen B. (See Wickersham & Brown, assignors.)					
200, 855	Cope, Ezra Hamilton, and James R. Maxwell, Cincinnati, Ohio. Valve for steam-engines .....	Mar. 5, 1878	41	15	13	421
202, 933	Same Valve for steam-engines .....	Apr. 30, 1878	1183	341	13	777
204, 295	Copeland, Frederick A., La Crosse, Wis. Ladder .....	May 28, 1878	1160	331	13	990
206, 987	Copeland, Frederick A., and Robert W. Taylor, La Crosse, Wis.; said Taylor assignor to said Copeland. Fire-escape .....	July 16, 1878	689	199	14	105
8, 138	Copeland, George W., et al. (See Crisp, Joseph E., assignor.)					
	Copeland, George W., Malden, Erastus Woodward and Matthias Brock, Boston, Mass., assignors, by mesne assignments, to Copeland Lasting Machine Company. Lasting-machine for boots and shoes .....	Mar. 26, 1878	1099	333	13	592
201, 914	Copeland, George W., Malden, Mass., assignor to Copeland Lasting Machine Company, Hartford, Conn. Boot and shoe lasting machine .....	Apr. 2, 1878	56	15	13	607
208, 156	Copeland, George W., Malden, Erastus Woodward, and Matthias Brock, Boston, Mass., assignors to Copeland Lasting Machine Company, Hartford, Conn. Machine for lasting boots and shoes .....	Sept. 17, 1878	622	184	14	437
209, 232	Copeland, George W., Malden, and Joseph E. Crisp, Boston, Mass. Lasting-machine .....	Oct. 22, 1878	865	251	14	621
210, 920	Copeland, George W., Malden, Mass. Lasting boots and shoes .....	Dec. 17, 1878	606	167	14	919
203, 818	Copeland, Ira, Brockton, Mass. Wringing-machine .....	May 21, 1878	637	179	13	920
	Copeland Lasting Machine Company. (See Copeland, George W., assignor.)					
	Same (See Copeland, Woodward & Brock, assignors.) (Reissue.)					
200, 374	Coplestone, Edwin, Boston, Mass. Hat .....	Feb. 19, 1878	507	149	13	327
8, 377	Coplin, Norman. (See Coplin, Wilbur, assignor.) (Reissue.)					
	Coplin, Wilbur, deceased, assignor to Norman Coplin, Cannon Falls, Minn. Millstone-dressing machine. (Reissue.)	Aug. 13, 1878	471	142	14	268
207, 393	Copman, Charles, assignor to self and H. Schmidt, New York, N. Y. Set-back sink .....	Aug. 27, 1878	787	224	14	318
207, 798	Copp, William J., Hamilton, Ontario, Canada. Shelf for cooking-stoves .....	Sept. 10, 1878	239	72	14	381
	Corbin, F., et al. (See Hart, Hubert C., assignor.)					
	Same (See Penfield, Charles W., assignor.)					
	Same (See Smith, Charles H., assignor.)					
	Same (See Sparks, William E., assignor.)					

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203, 503	Corbin, John, Danbury, Conn., assignor to self and Adelia J. Cowl, Brooklyn, N. Y. Pipe-tongs	May 14, 1878	373	111	13	882
205, 530	Corbin, John, New Harmony, Ind. Grain-drier	July 2, 1878	70	20	14	18
8, 089	Corbin, Lyman J., Winnebago, Ill. Seed-planter	Feb. 19, 1878	730	214	13	361
	Corbin, P., et al. (See Hart, Hubert C., assignor.)					
	Same..... (See Penfield, Charles W., assignor.)					
	Same..... (See Smith, Charles H., assignor.)					
	Same..... (See Sparks, William E., assignor.)					
199, 619	Corbin, P. & F. (See Sparks, William E., assignor.)					
199, 620	Corby, Edward P., Saint Louis, Mo. Automatic stove-pipe ventilator	Jan. 29, 1878	964	280	13	182
	Same..... Stove-pipe ventilator	Jan. 29, 1878	965	280	13	183
199, 268	Cordesman, Egan & Co. (See Cordesman, Henry J., jr., assignor.)					
	Cordesman, Henry J., jr., assignor to Cordesman, Egan & Co., Cincinnati, Ohio. Paneling-machine	Jan. 15, 1878	572	167	13	105
209, 865	Corey, James W., and Henry Charnbury, Newark, N. J. Sweat-band for hats	Nov. 12, 1878	361	108	14	733
198, 970	Corey, Jasper W., Salt Lake City, Utah. Revolving-hook sewing-machine	Jan. 8, 1878	261	74, 75	13	56
	Corey, William. (See Leighton, George A., assignor.)					
209, 382	Corkhill, Henry R., Rochester, N. Y. Globe-valve	Oct. 29, 1878	1027	298	14	647
204, 137	Cormack, George H., assignor to A. M. Johnston & Co., Rockford, Ill. Oatmeal-machine	May 28, 1878	993	282	13	969
210, 188	Same..... Oat-meal machine	Nov. 26, 1878	734	218	14	790
200, 788	Corman, Charles A. Cochituate, Mass. Peg-cutter	Feb. 26, 1878	935	275	13	400
203, 245	Corning, Cyrus, Lawrence, assignor of one-half interest to George E. Church, Williamsburg, Kans. Steam-cooker	May 7, 1878	9	4	13	822
210, 451	Cornell, Charles W., Wauseon, Ohio. Car-coupling	Dec. 3, 1878	64	16	14	832
	Cornell, George B. (See Lacy & Cornell)					
198, 839	Cornell, George W., Clarence Centre, assignor of one-half interest to M. De L. Cornell, Cowlesville, N. Y. Curtain-fixture	Jan. 1, 1878	117	33	13	27
210, 672	Cornell, John M., New York, N. Y. Lamp-black apparatus	Dec. 10, 1878	317	87	14	874
203, 594	Cornell, Lewis Tully, Chicago, Ill. Implement for capping, uncapping, and crimping cartridge-shells	May 14, 1878	393	111	13	882
	Cornell, M. De L. (See Cornell, George W., assignor.)					
206, 423	Cornell, Stephen Wood, Pleasantville, N. Y. Portable screen	July 30, 1878	1114	318	14	166
208, 890	Cornell, William N., and Charles Tollner, Pulaski, N. Y., assignor to selves and J. T. and L. H. Stevens, Washington, D. C. Machine for reducing wood to paper-pulp	Oct. 15, 1878	480	138	14	564
	Cornwall, Horace. (See Hammond, Henry, assignor.)					
209, 111	Cornwell, Willett, Philadelphia, Pa. Dress-chart	Oct. 22, 1878	740	215	14	604
206, 665	Corr, Columbus W., Carlinville, Ill. Power-hammer	Aug. 6, 1878	7	3	14	208
	Correll, Richard H. (See Craig, John W., assignor.)					
202, 413	Corrigan, Thomas, Brooklyn, N. Y. Shutter-worker	Apr. 16, 1878	596	176	13	691
205, 615	Corry, John, Menekanne, Wis. Pile	July 2, 1878	154	47	14	17
	Corry, Thomas F. (See Card, George F., assignor.)					
	Cort, Cyrus. (See Altfather, Henry D., assignor.)					
207, 394	Corthell, Samuel N., assignor to David Whittemore, Quincy, Mass. Heel-scouring machine	Aug. 27, 1878	788	234	14	318
207, 395	Same..... Rotary cutter for boots and shoes	Aug. 27, 1878	789	234	14	318
199, 033	Cosgrove, Henry E., Cambridge, Ohio. Hame	Jan. 8, 1878	321	94	13	66
204, 541	Cosgrove, William N., assignor of one-half interest to Henry W. Bingham and Isaac M. Fuller, Faribault, Minn. Grinding-mill	June 4, 1878	110	37	13	1028
	Coss, Richard, et al. (See Thompson, Salathiel S., assignor.)					
205, 057	Costa, Louis, Philadelphia, Pa. Combined globe and reflector for illuminating-burners	June 18, 1878	679	199	13	1109
	Costello, Patrick. (See Bell & Costello.)					
210, 299	Coston, John, Bowdon, Ga. Saw-filing machine	Nov. 26, 1878	840	250	14	805
209, 328	Cothren, Charles, New York, N. Y. Reflector	Oct. 29, 1878	969	282	14	638
207, 017	Cott, Charles M., Columbus, Ohio. Tablet-blitter	Aug. 13, 1878	378	116	14	256
	Cotter, Cyrus H., et al. (See Lottridge, William, assignor.)					
205, 681	Cotter, David A., Russell, and Nicholas Warrell, Agency City, Iowa. Washing-machine	July 2, 1878	234	69	14	38
206, 297	Cottingham, Gideon W., Denison, Tex. Railway-track	July 23, 1878	949	269	14	141
202, 412	Cottle, Shubael, New York, N. Y. Button	Apr. 16, 1878	596	175	13	691
200, 178	Cottner, John, New York, N. Y. Trunk	Feb. 12, 1878	296	88	13	287
210, 921	Cottrell, Albert W., Whitesville, N. Y. Thill-coupling	Dec. 17, 1878	607	168	14	919
203, 709	Cottrell, Calvert B., Westerly, R. I. Sheet-delivery apparatus for printing-machines	May 14, 1878	510	145	13	896
203, 710	Cottrell, Calvert B., assignor of one-half interest to Nathan Babcock, Westerly, R. I. Sheet-delivering apparatus for printing-machines	May 14, 1878	511	145	13	896
205, 357	Cottrell, Calvert B., Westerly, R. I. Printing-press	June 25, 1878	1008	298	13	1157
208, 796	Same..... Delivery apparatus for printing-machines	Oct. 8, 1878	367	104, 105	14	545
	Coulborne, Isaac H. (See Burckard, Augustus, assignor.)					
	Coulter, Benjamin F., et al. (See Healy, David, assignor.)					
200, 980	Coulter, Columbus M., assignor of one-half interest to Ezra A. Leonard, Danville, Ill. Cutter-head	Mar. 5, 1878	155	51	13	439
209, 866	Coulter, George A., Omaha, Nebr. Hame-fastener	Nov. 12, 1878	363	108	14	733
210, 503	Coulter, Thomas J., Elizabeth City, N. J., assignor to self and Augustus W. Merwin, Wilton, Conn. Meat-tenderer	Dec. 3, 1878	116	30	14	839
208, 572	Conniff, James, Oconto, Wis. Logging-sled	Oct. 1, 1878	121	35	14	505
	Countryman, Julius B. (See Brace, William H., assignor.)					
199, 415	Coupe, William, South Attleborough, Mass. Machine for boarding or breaking raw hides	Jan. 22, 1878	727	214	13	137
202, 414	Same..... Machine for boarding and breaking raw hides	Apr. 16, 1878	597	176	13	691
210, 922	Cousins, George, Oswego, N. Y. Ruler	Dec. 17, 1878	608	168	14	919
200, 131	Consland, William L., Philadelphia, Pa. Copying-press	Feb. 12, 1878	248	75	13	280
	Contie, James. (See Contie, William and James.)					
199, 898	Contie, William and James, Troy, N. Y. Ironing-machine	Feb. 5, 1878	7	3	13	234
	Contts, George H. (See Holmes, John, assignor.)					
	Covell, E. T. (See Bowie, Edwin R., assignor.)					
204, 656	Covell, Edward T., New Bedford, Mass. Manufacture of sheet-metal cans	June 11, 1878	240	75	13	1050
	Covell, Edward T. (See Maxfield, Charles P., assignor.)					
209, 024	Covert, Frank M., assignor of one-half interest to W. V. Gould, Lodi, N. Y. Rafter	Oct. 15, 1878	628	182	14	583
208, 226	Covert, Henry W., New York, N. Y. Self-lighting lamp	Sept. 24, 1878	709	209	14	452
208, 157	Covert, James C., Troy, N. Y. Rope-clamp	Sept. 17, 1878	628	185	14	438
201, 653	Covert, John S., Monroe, D. Garner, and L. B. Walthall, Modesto, Cal. Bag-holder	Mar. 26, 1878	884	269	13	560
	Cowan, Charles Herbert. (See Holdredge & Cowan.)					
200, 179	Cowan, Edward P., Germantown, Pa. Combined shawl-strap and head-rest	Feb. 12, 1878	269	88	13	287

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204, 206	Cowan, Richard W., and Charles Page, Montreal, Quebec, Canada. Aerial paddle-wheel.	May 28, 1878	1161	332	13	000
	Cowell, John J. (See Locke, John C., assignor)..... (Reissue.)					
	Same..... (See Semple, Edward, assignor)..... (Reissue.)					
199, 685	Cowing, Albert A., Watkins, N. Y. Portable mosquito-bar	Jan. 29, 1878	1040	303	13	194
8, 030	Cowing, George, Seneca Falls, N. Y., assignor to E. H. Cowles and Helen D. Cowing. Grinding-machine	Jan. 8, 1878	434	127	13	83
202, 551	Cowing, George, Cleveland, Ohio. Machine for making cores	Nov. 5, 1878	14	5	14	683
	Cowing, Helen D., et al. (See Cowing, George, assignor)..... (Reissue.)					
	Cowl, Adelia J. (See Corbin, John, assignor.)					
	Cowles, E. H., et al. (See Cowing, George, assignor)..... (Reissue.)					
201, 871	Cowles, Elijah H., Newcastle, Pa. Feather-renovator.	Apr. 2, 1878	13	4	13	600
	Cowles, Eugene, et al. (See Putnam, John T., assignor.)					
207, 715	Cowles, James A., Chicago, Ill. Lantern	Sept. 3, 1878	135	41	14	306
207, 716	Same..... same	Sept. 3, 1878	135	41	14	306
207, 018	Cowles, Samuel Henry, and Benjamin Barton Brewer, Sacramento, Cal. Propelling vessels	Aug. 13, 1878	879	116	14	257
201, 086	Cowles, Walcott, assignor to self and Samuel A. Seager, Syracuse, N. Y. Apparatus for placing elastic tubing upon spindles	Mar. 12, 1878	280	87	13	465
203, 424	Cowper, Edward Alfred, Westminster, England. Flier-bearing for spinning-machines	May 7, 1878	199	57	13	847
	Cox, Alfred. (See Russell, Samuel, assignor.)					
210, 300	Cox, Arthur W., Auburn, Me. Last	Nov. 26, 1878	850	250	14	805
200, 981	Cox, Camillus, Washington Heights, assignor of one-half interest to Charles H. Goodrich, Chicago, Ill. Combined hydrometer-cup and thief	Mar. 5, 1878	156	51	13	439
209, 283	Cox, Edward W., Cincinnati, Ohio. Bag-fastener	Oct. 22, 1878	865	251	14	621
208, 716	Cox, Elbert S., Jonesborough, Tenn. Millstone-dress	Oct. 8, 1878	278	70	14	534
203, 324	Cox, Elihu, Plainfield, Ind. Combined bridle and halter	May 7, 1878	95	27	13	852
207, 019	Cox, Joseph L., Milwaukee, Wis. Skylight sash and frame	Aug. 13, 1878	380	117	14	257
	Cox, Samuel L., Jr., et al. (See Nowell & Croft, assignors.)					
	Cox & Sedgwick. (See Cox, Stephen P., assignor.)					
203, 425	Cox, Stephen P., Brooklyn, assignor to Cox & Sedgwick, New York, N. Y. Locket	May 7, 1878	199	57	13	847
203, 426	Same..... Bracket	May 7, 1878	200	57	13	847
199, 416	Cox, Thomas Barber, Bloxwich, Great Britain. Machine for making lasting-tacks	Jan. 22, 1878	728	214	13	137
206, 933	Coxon, Samuel, Toronto, Canada. Signal-lantern	Aug. 13, 1878	298	91	14	247
201, 390	Coyne, John, Pittsburg, Pa. Apparatus for separating breeze from ashes	Mar. 19, 1878	600	184	13	517
	Cozine, John G. (See Harris, David, assignor.)					
	Crabtree, John D. (See McGregory, Crawford, assignor.)					
	Crackett, John F. (See Harrigan, Dennis, assignor.)					
	Craiger, George H. (See Carlton & Craiger.)					
201, 990	Craig, George W., assignor to self, Charles A. Wheeler, and Henry M. Staylor, Baltimore, Md. Toy trundle	Apr. 2, 1878	137	39	13	619
204, 888	Craig, George W., Arbuckle, W. Va. Weighing-scale	June 18, 1878	512	149	13	1087
198, 031	Craig, John W., assignor of one-third interest to Richard H. Correll, Kirkwood, Ill. Door-check	Jan. 8, 1878	222	63	13	50
	Craig, Joseph. (See Allenwood, Joseph M., assignor.)..... (Reissue.)					
	Craig, Joseph E. (See Frost, Francis C., assignor.)					
205, 358	Craig, Samuel, North Benton, Ohio. Fence	June 25, 1878	1010	299	13	1157
202, 332	Craig, Warren H., San Francisco, Cal. Governor for steam-engine	Apr. 16, 1878	519	152	13	690
208, 797	Craig, William, New York, N. Y. Direct-acting steam-pump	Oct. 8, 1878	369	105	14	548
208, 573	Craig, William H., Syracuse, N. Y. Coin-holder	Oct. 1, 1878	121	35	14	505
	Craighead, Horace. (See Nabe, Henry, assignor.)					
202, 236	Craighead, Horace, Mamaroneck, N. Y. Lamp	Apr. 9, 1878	401	117	13	060
200, 867	Craigie, Hugh H., assignor to Julia Craigie, Stamford, Conn. Diaphragm valve for water-tanks	Nov. 12, 1878	384	109	14	733
	Craigie, Julia. (See Craigie, Hugh H., assignor.)					
206, 884	Craigne, William S., and Charles D. Gaylord, Cleveland, Ohio. Feed-steamer	Aug. 13, 1878	228	73	14	239
206, 004	Crall, John J., Linn Creek, Mo. Quilting-machine	July 16, 1878	608	175	14	95
210, 013	Cram, Alonzo W., Haverhill, Mass. Sectional boiler	Nov. 10, 1878	532	160	14	759
	Cram, E. B., et al. (See Fox & Egelberger, assignors.)					
201, 752	Cram, Roys J., Detroit, Mich. Shaking grate-bar for steam-boilers	Mar. 26, 1878	976	298	13	575
203, 590	Cram, William, Raleigh, N. C. Packing for piston and other rods	May 14, 1878	306	112	13	882
203, 597	Cramer, Ephraim D., Hacktstown, N. J. Spring-bottom for vehicles	May 14, 1878	396	112	13	882
204, 801	Cramer, George R., Cincinnati, Ohio. Spoke-throating machine	June 11, 1878	390	110	13	1060
	Cramp & Son's Ship and Engine Building Company, William. (See Wilson, Joseph Shields, assignor.)					
198, 840	Crandal, George L., Binghamton, N. Y. Carriage-knob	Jan. 1, 1878	118	34	13	27
190, 798	Same..... Carriage curtain-loops	Jan. 29, 1878	1137	334	13	209
200, 298	Same..... Buckle and loop-fastening	July 23, 1878	10	269	14	141
203, 240	Crandall, Henry S., Binghamton, N. Y. Carriage-top prop.	May 7, 1878	949	4	13	822
207, 348	Crandall, Henry B., assignor of one-half interest to Watson Holmes, Homer, N. Y. Blacksmith's butteris	Aug. 27, 1878	744	222	14	312
199, 518	Crandall, Jesse A., Brooklyn, N. Y. Velocipede	Jan. 22, 1878	830	243	13	154
205, 350	Crandall, Lucius P., Eau Claire, Wis., assignor to Clark Robinson and Joseph F. Ellis. Trace-fastening	June 25, 1878	1011	299	13	1157
	Crane, Anna B. (See Crane, Israel, assignor.)					
208, 296	Crane, Daniel, Seneca Falls, N. Y. Metallic button-hole stay for boots and shoes	Sept. 24, 1878	788	230	14	461
203, 001	Crane, Edward N., Newark, N. J. Bridle-bit	Apr. 30, 1878	1247	361	13	785
8, 260	Crane, Ellaha, Elkhart City, Ill., assignor to Charles La Dow. Harrow-cultivator. (Reissue.)	May 28, 1878	1293	368	13	1007
	Same..... Harrow-cultivator..... (Reissue.)	May 28, 1878	1295	368	13	1007
203, 002	Crane, Frederick, Bloomfield, N. J. Manufacturer of bridle-bits	Apr. 30, 1878	1248	361	13	785
205, 176	Crane, Israel, assignor to Anna B. Crane, New York, N. Y. Child's kilt suit	June 25, 1878	814	242	13	1132
207, 045	Crane, Michael, New York, N. Y. Pan for backing electrotypeshells	Sept. 3, 1878	65	19	14	357
202, 999	Crane, Robert B., Westfield, Mass. Paper basket	Apr. 30, 1878	1245	360	13	785
203, 000	Same..... Art of making seamless paper baskets	Apr. 30, 1878	1246	360	13	785
204, 802	Crane, Seymour, Dalton, Mass. Milk-pail	June 11, 1878	398	116	13	1069
207, 256	Same..... Brush	Aug. 20, 1878	636	190	14	293
	Cranford, John P., et al. (See Morgan, William, assignor.)					
210, 101	Cranford, John P., assignor to self and Nathan B. Abbott, Brooklyn, N. Y. Composition pavement	Nov. 19, 1878	627	186	14	772
210, 102	Cranston, Giles S., Clinton, N. Y. Middling-bolt	Nov. 19, 1878	628	186	14	772
206, 230	Cranston, Charles, assignor of one-half interest to Ezra J. Sterling, Brooklyn, N. Y. Gage for paper-cutting machines	July 23, 1878	872	249	14	131
201, 753	Cranston, George W., San Francisco, Cal. Sand or earth elevator	Mar. 26, 1878	977	299	13	575
209, 661	Same..... Hydraulic mining apparatus	Nov. 5, 1878	138	40, 41	14	699



## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
205, 787	Cranston, Walter French, West Middleburg, Ohio. Coffee and peanut roaster .....	July 9, 1878	365	105	14	58
8, 416	Crary, John W., Philadelphia, Pa. Hot-air furnace .....	Sept. 17, 1878	691	203	14	445
192, 034	Crawford, Harvey F., Brookton, Mass. Burglar-alarm .....	Jan. 8, 1878	322	95	13	66
190, 519	Crawford, John, assignor to James Stephens and E. P. Gleason, New York, N. Y. Water-filter .....	Jan. 22, 1878	830	243	13	154
	Crawford, John A. (See Black, Willie, assignor.) .....					
	Crawford, John W. (See Vanderston, Alvin W., assignor.) .....					
205, 728	Crawford, Lyman, North Bennington, Vt. Oil-can .....	July 9, 1878	300	88	14	50
	Crawford, Samuel. (See Dunseith & Crawford.) .....					
203, 711	Crawford, William M., Shiloh, Ohio. Lifting-jack .....	May 14, 1878	513	145	13	897
206, 090	Crawford, Witsius A., Terre Haute, Ind. Stop and waste attachment for water-pipes .....	July 16, 1878	692	200	14	105
202, 156	Crawley, Edwin, Newport, Ky., assignor to John R. Davey, Cincinnati, Ohio. Machine for preparing fly-leaves for books .....	Apr. 9, 1878	317	94, 95	13	648
205, 360	Crawley, John B., Brooklyn, N. Y. Steam-engine .....	June 25, 1878	1012	299	13	1157
207, 717	Creager, Jonathan, Cincinnati, Ohio. Wood-polishing machine .....	Sept. 3, 1878	137	41	14	366
	Creaser, David, et al. (See Condon, William F., assignor.) .....					
209, 463	Creasey, Edward J., Philadelphia, Pa. Ice-breaker .....	Oct. 29, 1878	1110	323	14	659
210, 996	Crees, Thomas Walter, Birmingham, England. Machine for shaping and ornamenting sheet-metal vessels .....	Dec. 17, 1878	691	190	14	929
	Creighton, Miller R. (See Miller & Creighton.) .....					
	Cremins, William H. (See Morris, Joseph G., assignor.) .....					
202, 705	Cress, Henry Daniel, assignor to self and Samuel C. Makemson, Cromwell, Ind. Draft-equalizer .....	Apr. 23, 1878	933	266	13	740
206, 005	Cress, Samuel Edward, Hillsborough, Ill. Folding shaving-horse .....	July 16, 1878	609	176	14	95
205, 948	Creter, George, New York, N. Y. Machine for making heels for boots and shoes .....	July 16, 1878	549	156	14	87
210, 840	Creuzbauer, Robert, Brooklyn, N. Y. Utilizing bisulphide of carbon as a motive power .....	Dec. 17, 1878	498	141	14	906
210, 014	Cripe, David E., North Manchester, Ind. Mechanical movement .....	Nov. 19, 1878	534	160	14	759
	Crippin, William L., et al. (See Brannon, James Casey, assignor.) .....					
	Crisp, Joseph E. (See Copeland & Crisp.) .....					
210, 452	Crisp, Joseph E., Boston, assignor to George W. Copeland, Malden, and Willard Comey, Westborough, Mass. Mechanical movement .....	Dec. 3, 1878	65	16, 17	14	833
200, 514	Cristy, Samuel, and David Jay, Floris, Iowa. Gate .....	Feb. 19, 1878	639	188	13	347
209, 329	Crittenden, Mason, Hatfield, assignor of one-half interest to Edward E. Scribner, Saint Paul, Minn. Metallic siding for buildings .....	Oct. 29, 1878	970	283	14	638
	Crivel, Henry. (See Duvelius & Crivel.) .....					
198, 971	Crocker, John B., Alton, Ill. Apparatus for drying or cooking fruit, &c .....	Jan. 8, 1878	262	75	13	56
	Crocker Manufacturing Company. (See Syms, William E., assignor.) .....					
	Crocker, Rawson. (See Chance, Henry, assignor.) .....					
	Crocker, Richard. (See Lytle & Crocker.) .....					
	Crocker, Rufus C. (See Foster, Hickman E., assignor.) .....					
201, 333	Crocker, Silas S., and Albert Wilcox, Clarence, Iowa. Wagon bolster-plate .....	Mar. 19, 1878	543	167	13	509
204, 482	Same. Foot-bath for horses .....	June 4, 1878	62	21	13	1021
	Crockett, John. (See Hillen & Crockett.) .....					
210, 997	Crockett, Samuel J., assignor to self and William J. McLaughlin, Boston, Mass. Sad-iron heater .....	Dec. 17, 1878	603	191	14	929
206, 006	Crookford, Alfred H., Newark, N. J. Bit-clamp .....	July 16, 1878	610	176	14	95
	Crofoot, A. B., et al. (See Stockbridge, Lyman R., assignor.) .....					
201, 596	Croft, David L., Springfield, Ohio. Belt-tightener .....	Mar. 26, 1878	828	252	13	552
201, 334	Croft, Henry, sr., and Henry, jr., Springfield, Ohio. Wind-engine .....	Mar. 19, 1878	544	167	13	509
209, 662	Croft, Jacob, Scipio, Utah. Turbine water-wheel .....	Nov. 5, 1878	139	41	14	700
	Croft, Joseph. (See Newell & Croft.) .....					
	Croft, William M. (See Ewing, William H., assignor.) .....					
208, 801	Cromer, Samuel, Fort Littleton, Pa. Hood for cooking-stoves .....	Oct. 15, 1878	480	138	14	564
	Crompton, George. (See Gordon, Albert A., assignor.) .....					
	Same. (See Renwick, Henry B., assignor.) .....					
200, 375	Crompton, George, Worcester, Mass. Clutch-mechanism .....	Feb. 19, 1878	567	150	13	327
208, 297	Cromwell, John B., Milwaukee, Wis. Millstone-displacing apparatus .....	Sept. 24, 1878	789	230	14	461
204, 297	Crooke, John Jeremiah, Southfield, and Lewis Crooke, New York, N. Y. Coating lead articles with tin .....	May 28, 1878	1162		13	990
	Crooke, Lewis. (See Crooke, John Jeremiah and Lewis.) .....					
203, 595	Crooke, New York, N. Y. Tumbling-barrel .....	May 14, 1878	395	111	13	882
204, 298	Same. Tin-plated shot .....	May 28, 1878	1163		13	990
208, 798	Crooker, George Augustus, Charlottesville, Va. Clothes-washer .....	Oct. 8, 1878	371	105	14	545
	Crooker, Heman D. (See Brooks & Crooker.) .....					
208, 717	Crooks, Thomas R., assignor of two-thirds interest to Harry N. Evans and Charles C. Wilson, Philadelphia, Pa. Condenser .....	Oct. 8, 1878	279	79	14	534
	Cropley, Arthur B., et al. (See Duvall, William T., assignor.) .....					
	Cropley, Richard L., et al. (See Duvall, William T., assignor.) .....					
208, 073	Cropp, Francis Marion, Platte County, Mo. Cultivator .....	Sept. 17, 1878	534	159	14	425
	Crosby, Abel A. (See Gilzinger, Sebastian, assignor.) .....					
203, 892	Crosby, Augustine, Benton, Me. Vacuum-dredger .....	May 21, 1878	768	203	13	929
208, 961	Crosby, George H., East Somerville, Mass. Steam-cock .....	Oct. 15, 1878	500	163	14	575
208, 962	Same. Low-water alarm for steam-boilers .....	Oct. 15, 1878	501	164	14	575
208, 963	Same. Water-gage .....	Oct. 15, 1878	502	164	14	575
	Crosby, John Q. (See Pentreath & Crosby.) .....					
206, 540	Crosby, Renslow, Boston, Mass. Means of attaching saw-handles .....	July 30, 1878	1234	355	14	181
199, 621	Cross, Alonzo T., Providence, R. I. Fountain-pen .....	Jan. 29, 1878	965	280	13	183
209, 959	Same. same. same .....	Nov. 19, 1878	472	142	14	751
206, 299	Cross, Benjamin, Alexandria, Pa. Gate .....	July 23, 1878	951	269	14	142
208, 964	Cross, Benjamin Howard, Cabaniss, Ga. Cultivator .....	Oct. 15, 1878	563	164	14	575
210, 998	Cross, Christopher G., Chicago, Ill. Check-row planter .....	Dec. 17, 1878	694	191	14	929
199, 035	Cross, David L., Austin, Tex. Water-wheel .....	Jan. 8, 1878	323	95	13	66
200, 260	Cross, Ira D., Reno, Nev. Fire-escape .....	Feb. 12, 1878	377	111	13	299
204, 299	Cross, Ira Davis, San Francisco, Cal. Fire-escape .....	May 28, 1878	1165	332	13	990
210, 404	Cross, Jesse G., Aurora, Ill. Fountain-pen .....	Dec. 3, 1878	14	5	14	826
	Cross, John R. (See Swartz & Cross.) .....					
203, 003	Cross, Robert A., Boston, Mass. Apparatus for washing and condensing coal-gas .....	Apr. 30, 1878	1249	361	13	785
202, 237	Cross, William C., Boston, Mass. Sewing-machine needle .....	Apr. 9, 1878	462	117	13	660
	Crossley, A. S., et al. (See Crossley, Columbus M., assignor.) .....					
208, 074	Crossley, Columbus M., assignor to self, A. S. Crossley, and T. W. Bearden, Rutledge, Ga. Plow-stock .....	Sept. 17, 1878	534	160	14	426
	Crossley, Francis W. (See Otto & Crossley.) .....					
204, 715	Crossley, James W., Augustus A. Hagen, and George Juengst, New York, N. Y., assignors to Crossley. Tobacco-cutting machine .....	June 11, 1878	302	93	13	1058
	Crossley, William J. (See Otto & Crossley.) .....					



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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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208, 075	Crossman, J. H., et al. (See Moore, Charles T., assignor.)	Sept. 17, 1878	535	100	14	426
209, 112	Crotsenburg, Nicholas, Jancaville, Wis. Flat-iron heater.	Oct. 22, 1878	742	215	14	604
209, 234	Crotty, John S., New York, N. Y. Corset-clasp.	Oct. 22, 1878	866	251	14	621
208, 224	Crouch, R. B., et al. (See Aldridge, Hiram, assignor.)	Sept. 24, 1878	708	.....	14	452
208, 965	Crowell, Azariah F., Wood's Holl, Mass. Fertilizer.	Oct. 15, 1878	564	164	14	575
210, 599	Crowell, Hilen C. (See Southard, Crowell & Hallock.)	Dec. 10, 1878	238	65	14	864
209, 760	Crowell, John H., assignor of one-half interest to Kendrick Loom Harness Company, Providence, R. I. Harness for looms.	Nov. 12, 1878	294	88	14	724
199, 188	Crowell, Solomon, assignor to Frank J. Garvin, Palmyra, N. Y. Ale-pitcher.	Jan. 15, 1878	495	145	13	93
205, 177	Crowell, Solomon, assignor of two-thirds interest to William H. H. Osborne and Hiram G. Clark, Palmyra, N. Y. Stove-pipe damper.	June 25, 1878	814	242	13	1132
200, 025	Crowell, William. (See Hall & Crowell.)	Oct. 15, 1878	629	182	14	584
205, 240	Crowley, John J., Ackley, Iowa. Horse-collar.	June 25, 1878	888	263	13	1142
202, 238	Crowley, John Sidney, Manchester, England. Bobbin.	Apr. 9, 1878	403	117 118	13	660
	Crowson, William L., Memphis, Tenn. Combined feeder and cleaner for cotton-gins.					
208, 073	Croyle, Samuel H. (See Patterson, Lemuel, assignor.)	Oct. 8, 1878	232	66	14	528
206, 541	Cruckshank, George M. (See Goldsmith, Cruckshank & Brown.)	July 30, 1878	1235	355	14	181
199, 187	Crum, George H., Ladlesburg, Md. Feather-renovator.	Jan. 15, 1878	494	145	13	93
198, 700	Crumb, Joseph H. (See Lewis & Crumb.)	Jan. 1, 1878	79	21	13	20
210, 015	Crump, Samuel, Mont Clair, N. J. Printer's chase.	Nov. 10, 1878	535	161	14	759
210, 750	Crump, Thomas J., assignor of one-half interest to David T. Pounds, Buena Vista, Tex. Motor for operating churns.	Dec. 10, 1878	404	110	14	884
	Crumrine, Benton V., Yuba City, Cal. Spark-extinguisher.					
206, 300	Cruse, William, and John D. Isaacs, Oakland, Cal. Shutter.	July 23, 1878	951	269 270	14	142
201, 161	Cryne, Gilbert S., assignor of one-half interest to Benjamin F. Moore, Fond du Lac, Wis. End-gate for wagons.	Mar. 12, 1878	345	106	13	474
201, 162	Cubbage, John W., et al. (See Alexander, Andrew Jackson, assignor.)	Mar. 12, 1878	345	106	13	474
201, 391	Cucherat, Paul, Lyons, France. Coil-spring machine.	Mar. 19, 1878	602	184	13	517
204, 203	Cudell, Frank E., Cleveland, Ohio. Sewer-gas trap.	May 28, 1878	1070	305	13	979
202, 523	Cullen, Michael, assignor of one-half interest to Matthew Hogan, Hartford, Conn. Steam-generator.	Apr. 16, 1878	705	205	13	706
	Cullen, Thomas, San Francisco, Cal., assignor of one-half interest to Benjamin T. Babbitt, New York, N. Y. Feathering paddle-wheel.					
	Culp, James D. (See Isaacs, William B., assignor.)					
	Culter, R. A. (See Boehl, Carl, assignor.)					
202, 239	Culter, Richard A., et al. (See Kinsey, Samuel A., assignor.)	Apr. 9, 1878	405	118	13	660
202, 157	Culver, Charles B., et al. (See Baker, William C., assignor.)	Apr. 9, 1878	326	95	13	649
204, 204	Culver, Tuttle, New York, N. Y. Putting up boneless hams.	May 28, 1878	1071	305	13	979
	Cummings, Josiah E., Utica, N. Y. Ash-sifter.					
202, 415	Cummerford, Francis P., Wilmington, Del. Head-protector for the use of firemen, shipwrecked persons, &c.	Apr. 16, 1878	598	176	13	691
200, 822	Cumming, Thomas, Hackensack, N. J. Platform for submarine rock-drilling.	Mar. 5, 1878	7	3	13	416
203, 893	Cummings, Cyrus, Woburn, Mass. Carpet-cleaner.	May 21, 1878	710	203	13	929
199, 189	Cummings, Daniel M., Enfield, N. H. Car wheel and axle.	Jan. 15, 1878	496	146	13	93
200, 159	Cummings, George W., jr., Big Rapids, Mich. Oscillating chair.	Oct. 22, 1878	793	230	14	611
200, 516	Cummings, George W., San Francisco, Cal. Dredging-machine.	Feb. 19, 1878	640	188	13	348
206, 301	Cummings, James K., Ladonia, Tex. Motor.	July 23, 1878	955	271	14	142
8, 448	Cummings, Matthew L., assignor to John M. Sheldon, Philadelphia, Pa. Curtain-cord tightener.	Oct. 15, 1878	715	207	14	596
205, 616	Cummings, Samuel M., Boston, Mass., assignor of part interest to John White and John Marquis, Allegheny, Pa. Car-bumper.	July 2, 1878	155	.....	14	29
210, 189	Cummings, Uriah, assignor to self and Arthur W. White, Buffalo, N. Y. Rock-drill.	Nov. 26, 1878	735	218	14	790
207, 718	Cummins, William G., Cookville, Tenn. Horse-detacher.	Sept. 3, 1878	138	42	14	366
207, 951	Same. Same.	Sept. 10, 1878	395	119	14	402
210, 673	Cunliff, William, Providence, R. I. Stove-door knob.	Dec. 10, 1878	320	87	14	874
200, 082	Cunliffe, George D., Brooklyn, N. Y. Refrigerator-box.	Mar. 5, 1878	157	51	13	440
200, 515	Cunningham, Andrew G., John Winhofer, and Robert M. Rice, Keota, Iowa. Feed-cooker.	Feb. 10, 1878	639	168	13	347
210, 674	Cunningham, Charles W., San Francisco, Cal. Street-sweeper.	Dec. 10, 1878	321	87	14	874
204, 483	Cunningham, John G., Kentland, Ind. Sandal.	June 4, 1878	63	21	13	1021
200, 983	Cunningham, John H., Chelsea, Mass. Steam-radiator.	Mar. 5, 1878	158	52	13	440
199, 799	Cunningham, William F., Brooklyn, N. Y. Radiator.	Jan. 29, 1878	1137	334	13	209
199, 800	Same. Drinking-fountain.	Jan. 20, 1878	1138	334	13	209
210, 301	Curier, James, and Walter F. Warren, Henning, Tenn. Well-auger.	Nov. 26, 1878	851	251	14	805
210, 999	Curran, Michael C., Chicago, Ill. Lumber-drier.	Dec. 17, 1878	695	191	14	929
200, 856	Curren, James, Providence, R. I. Safety-stop for children's carriages.	Mar. 5, 1878	42	15	13	422
201, 097	Currie, John, London, Ontario, Canada. Gang-plow frame.	Mar. 12, 1878	282	87	13	465
	Currie, Granville H. (See Weed, James William, assignor.)					
208, 892	Currier, Osceola, Newark, N. J. Printing and painting machine.	Oct. 15, 1878	481	138 139	14	564
206, 606	Currier, Richard, Boston, Mass. Carpet-fastener.	Aug. 6, 1878	9	3	14	208
207, 257	Currier, William D. (See Gillin, Robert F., assignor.)	Aug. 20, 1878	637	190	14	293
202, 000	Curry, George W., Buffalo, N. Y. Scouring-board.	Apr. 2, 1878	137	40	13	619
209, 464	Curtice, Jessie M., Mount Sterling, Ky. Water-filter.	Oct. 29, 1878	1110	323	14	659
209, 465	Curtin, Martin, Houston, Tex. Steam-cooking apparatus.	Oct. 29, 1878	1111	323	14	659
	Curtis, Andrew J., East Williamson, N. Y. Harvester guard-finger.					
	Curtis, Edward A., et al. (See Burrell, Jarvis, assignor.)					
210, 100	Curtis, George S. (See Reiff, William H., assignor.)	Nov. 26, 1878	736	218	14	790
200, 084	Curtis, Henry, Chicago, Ill., assignor of one-fourth interest to J. Russell Parsons, Hoosick Falls, N. Y. Wire-band cutter.	Mar. 5, 1878	159	52	13	440
209, 383	Curtis, Jeremiah W., New York, N. Y. Bottle-stopper.	Oct. 29, 1878	1028	290	14	647
	Curtis, John B., Calumet, Mich. Automatic fire-kindler.					
	Curtis, John E. (See Tate & Curtis.)					
	Curtis, Orville H. (See Knight, Curtis & Gibbs.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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202, 934	Curtis, Rowland K., assignor to Wabash School Furniture Company, Wabash, Ind. School-desk.	Apr. 30, 1878	1184	342	13	777
206, 542	Curtis, Rowland K., Wabash, Ind. Grocer's bin.	July 30, 1878	1236	355	14	181
199, 962	Curtis, Stephen, <i>et al.</i> (See Morrison, Enoch R., assignor.)					
203, 598	Curtis, Thomas V., and A. Milton Andrews, Lemars, Iowa. Meal beater and steamer.	Feb. 5, 1878	73	24	13	244
208, 076	Curtis, Thomas V., and A. Milton Andrews, Lemars, Iowa, assignors to said Curtis. Hoe and cultivator.	May 14, 1878	307	112	13	883
	Curtis, Thomas V., Lemars, Iowa. Turn-table for stove-ovens.	Sept. 17, 1878	536	100	14	426
	Curtiss, C. B., <i>et al.</i> (See Ritchel, Charles Francis, assignor.)					
	Curtiss, Fred B., <i>et al.</i> (See Curtiss, William H., assignor.)					
	Curtiss, James E. (See Burch & Curtiss.)					
	Curtiss, James M., <i>et al.</i> (See Bullock, E. Koyl, assignor.)					
200, 517	Curtiss, William H., assignor of two-thirds interest to R. H. Bickford and Fred. B. Curtis, Buffalo, N. Y. Belting.	Feb. 19, 1878	041	189	13	348
207, 719	Curtiss, Winthrop Ezra, Hoppenville, Pa. Railway-tie.	Sept. 3, 1878	139	42	14	307
210, 841	Cusack, William Hendrie, and Edward B. Veronee, Nashville, Tenn. Rotary water-meter.	Dec. 17, 1878	503	142	14	906
200, 436	Cushing, Elbridge G., assignor of one-half interest to H. H. Kendrick, Oswego, N. Y. Mill-spindle bush and tram.	Feb. 19, 1878	565	107	13	336
208, 158	Cushing, Harry C., assignor to Edlington Detrick, San Francisco, Cal. Tent-pole.	Sept. 17, 1878	628	185	14	438
203, 247	Cushman, Andrew R., Memphis, Mo. Wagon-brake.	May 7, 1878	11	4	13	822
200, 261	Cushman, Austin F., Hartford, Conn. Lathe-chuck.	Feb. 12, 1878	378	111	13	290
201, 597	Cushman, Charles H., Erie, Pa. Combined shoulder-brace and suspender.	Mar. 26, 1878	820	252	13	552
209, 026	Cushman, Cyrus S., assignor to Nesbitt D. Stoops, Philadelphia, Pa. Sewing-machine.	Oct. 15, 1878	630	162	14	584
8, 049	Cushman, Dwight, Hartford, Conn. Water-wheel. (Reissue.)	Jan. 22, 1878	938	273	13	170
8, 197	Cushman, Francis A., Lebanon, N. H., assignor to William A. Russell. Stock-grinder for paper pulp. (Reissue.)	Apr. 23, 1878	1163	334	13	770
8, 198	Same. Wood-grinder for paper-pulp. (Reissue.)	Apr. 23, 1878	1164	334	13	770
201, 501	Cushman, Francis A., Lebanon, N. H. Wood-pulping machine. (Reissue.)	Mar. 10, 1878	710	216	13	533
205, 247	Cushman, Henry T., North Bennington, assignor to Henry C. Babcock and Nathan O. Wilcox, Bennington, Vt. Mucilage-bottle stopper.	June 25, 1878	880	203	13	1142
199, 190	Cushman, Joseph and Josiah B., Thomson, Ill. Wind-mill.	Jan. 15, 1878	496	146	13	94
	Cushman, Josiah B. (See Cushman, Joseph and Josiah B.)					
205, 361	Cussen, William J., Richmond, Va. Device for packing smoking-tobacco.	June 25, 1878	1014	299	13	1157
205, 058	Custer, George, Bremond, Tex. Cotton-picker.	June 18, 1878	680	190	13	1109
	Cuthbertson, James. (See Fender, William J., assignor.)					
	Cutler, Charles F., <i>et al.</i> (See Cutler, Henry, assignor.)					
205, 248	Cutler, Charles H., Lawrence, Mass. Wagon-cover.	June 25, 1878	890	203	13	1142
	Cutler, George F., <i>et al.</i> (See Cutler, Henry, assignor.)					
203, 004	Cutler, Henry, Wilbraham, assignor to self, C. F., and George E. Cutler, and Benjamin T. Thompson, Farmingham, Mass. Grain-drier.	Apr. 30, 1878	1251	362	13	785
203, 599	Cutliff, John M., Albany, Ga. Bale-tie.	May 14, 1878	397	112	13	883
204, 008	Cutshaw, Levi, Greenville, Tenn. Churn.	May 21, 1878	840	240	13	946
206, 166	Cutten, Elisha B., Boston, Mass. Galvanic battery.	July 23, 1878	800	229	14	122
199, 209	Cutter, Francis L., Brooklyn, N. Y. Cover for lamp-shades.	Jan. 15, 1878	573	167	13	105
	Cutter, John A. (See Closson, Sylvanus M., assignor.)					
209, 384	Cutts, Addison D., Scriven, Ca. Package for bleaching and packing rosin.	Oct. 29, 1878	1020	299	14	647
205, 729	Cuzner, J. B., <i>et al.</i> (See Ritchel, Charles Francis, assignor.)					
205, 730	Cziner, Matyas, assignor of part interest to James Baker and Samuel Levy, New York, N. Treating corn mash.	July 9, 1878	301	80	14	51
206, 301	Same. Apparatus for mashing.	July 9, 1878	302	80	14	51
	Cziner, Matyas, Stapleton, assignor of one-half interest to Frederick A. Kelling and George J. Greenfield, Richmond County, N. Y., and the remaining one-half to Frederick A. Kelling, trustee. Digester.	July 30, 1878	1078	308	14	161
209, 466	Dabbs, William H., Philadelphia, Pa. Bottle-stopper.	Oct. 29, 1878	1111	224	14	650
204, 009	Dabney, Charles W. (See Dabney, Robert L. and Charles W., Jr.)					
	Dabney, Robert L., Hampden Sidney, and Charles W. Dabney, Jr., Emory, Va. Railway-car.	May 21, 1878	841	240	13	946
8, 364	Daddow, Esther A., executrix. (See Daddow, Samuel II.) (Reissue.)					
	Dadow, Samuel H., deceased, by Esther A. Dadow, executrix, Saint Clair, Pa. Squib for blasting. (Reissue.)					
202, 240	Dadisman, Martin V., Luray, Va. Combined grain-drill and fertilizer.	Aug. 6, 1878	210	67	14	232
	Dager, John H., <i>et al.</i> (See Burgess, Warren S., assignor.)	Apr. 9, 1878	406	118	13	600
204, 425	Daggett, Aaron Simon, United States Army. Metallic tent-pins.	June 4, 1878	11	4	13	1014
199, 855	Daggett, Henry R., Paxton, Ill. Tree-protector.	Jan. 22, 1878	670	196	13	128
	Daggett, H. N. (See Barrows, William E., assignor.)					
201, 892	Dahler, August, and F. W. Hoffman, assignors to A. Weidmann, New York, N. Y. Toy revolver.	Mar. 19, 1878	603	185	13	517
199, 270	Daily, Parley A., New York, N. Y. Manufacturer of ornamental felt fabrics.	Jan. 15, 1878	574	167	13	105
8, 152	Dake, Horace M., Nunda, N. Y. Portable fence. (Reissue.)	Apr. 2, 1878	234	68	13	632
209, 330	Dale, James, Chicago, Ill. Paper-ruled machine.	Oct. 29, 1878	971	283	14	638
8, 295	Dale Tile Manufacturing Company (limited). (See Dale, William, assignor.) (Reissue.)					
8, 365	Dale, William, assignor, by mesne assignments, to Dale Tile Manufacturing Company (limited), New York, N. Y. Illuminating vault-cover. (Reissue.)	June 25, 1878	1110	329	13	1171
	Dale, William, assignor to Dale Tile Manufacturing Company (limited), New York, N. Y. Cover for openings in sidewalks. (Reissue.)					
203, 617	D'Alessandro, Benvenuto B., Rome, Italy. Life-preserving satchel.	Aug. 6, 1878	210	67	14	232
209, 407	Daley, Michael, Waterman, Ill. Barbed-wire fence.	July 2, 1878	157	47	14	29
206, 543	Dallman, Walter M., Syracuse, N. Y. Bail and ear.	Oct. 29, 1878	1112	324	14	650
205, 249	Dalton, John, Bonches, Wis. Neck-yoke adjuster.	July 30, 1878	1230	356	14	181
199, 801	Dalton, Joseph, assignor of one-half interest to Gustave Simon, New York, N. Y. Boot and shoe heel.	June 25, 1878	890	264	13	1142
199, 520	Dalton, Milton A., Cincinnati, Ohio. Time-lock.	Jan. 29, 1878	1139	334	13	209
209, 235	Daly, William F., Peru, Ind. Table-leaf support.	Jan. 22, 1878	832	243	13	154
206, 302	Dalzell, David, South Egremont, Mass. Carriage-spring.	Oct. 22, 1878	867	252	14	621
210, 092	Same. Thill-coupling.	July 23, 1878	955	271	14	142
207, 853	Dalzell, Robert H., Kilbuck Township, Allegheny County, Pa. Cartridge-loading mechanism.	Nov. 19, 1878	616	183	14	771
209, 663	Dalzell, Samuel M., assignor of one-half interest to Earl A. Wheeler, Sharon, Pa. Bag-holder.	Sept. 10, 1878	288	88, 89	14	389
	Damon, George L. (See Geer, George F., assignor.)					
200, 823	Damon, George L., Boston, Mass. Burglar-proof safe.	Nov. 5, 1878	140	41	14	700
		Mar. 5, 1878	8	3	13	416

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
199, 271	Damon, George W., Brooks, Me. Lap-seat for wagons	Jan. 15, 1878	515	168	13	105
204, 803	Dana, Charles H., assignor to self and D. U. Marston, Lebanon, N. H. Stencils	June 11, 1878	389	117	13	1069
205, 362	Dana, Peater D. (See Randall & Dana.)					
199, 802	Dana, Lester D., Waupaca, Wis. Friction-clutch	June 25, 1878	1014	300	13	1157
208, 574	Dancel, Christian, New York, and Edmund C. Smith, Brooklyn, N. Y. Skiving-machine	Jan. 29, 1878	1140	335	13	210
203, 894	Dane, Joseph Warren, Boston, Mass. Drawer-support	Oct. 1, 1878	122	35	14	505
210, 103	Danforth, George, Cochituate, Mass. Apparatus for dressing boot and shoe soles	May 21, 1878	711	203	13	929
207, 258	Danforth, R. P. (See Breslau, William, assignor.)	Nov. 19, 1878	629	186	14	772
199, 037	Danforth, Roderick F., Baltimore, Md. Vapor-burner	Aug. 20, 1878	637	190	14	293
209, 037	Dangler, H. J. (See Dangler, William Scott, assignor.)					
209, 868	Dangler, William Scott, assignor of one-half interest to H. J. Dangler, Ottawa, Ohio. Gate-hanger	Jan. 8, 1878	324	95	13	66
199, 036	Dangoise, Ernest, Brussels, Belgium. Machine for cutting and rolling paper	Nov. 12, 1878	360	109	14	733
204, 484	Daniel, Charles, Virginia, Mo. Reversible plow	Jan. 8, 1878	324	95	13	66
209, 331	Daniel, Littleton, Montgomery, Ala. Medical compound	June 4, 1878	63	21	13	1021
202, 241	Daniel, John. (See Roberts, William, Jr., assignor.)	Oct. 29, 1878	973	.....	14	639
199, 622	Daniels, Charles A., Waterville, N. Y. Car-ventilator	Apr. 9, 1878	409	119	13	600
201, 672	Daniels, George N. (See Parsons, Shaw & Daniels.)					
205, 731	Daniels, Horace L., Redwood Falls, Minn. Gang and sulky plow	Jan. 29, 1878	966	281	13	183
205, 731	Daniels, Taylor E., and Abraham Reed, Chicago, Ill. Coffin	Apr. 2, 1878	15	4	13	000
205, 732	Daniels, Taylor E., Chicago, Ill. Mold for artificial-marble coffins	July 9, 1878	304	89	14	51
208, 377	Daniels, Taylor E., Detroit, Mich. Mold for artificial-stone coffins	July 9, 1878	305	89	14	51
204, 542	Daniels, Theodore I., Morrison, Ill. Combined cultivator and corn-plow	Sept. 24, 1878	809	253	14	471
199, 356	Daniels, William, Brooklyn, N. Y. Millstone cooling apparatus	June 4, 1878	111	37, 38	13	1028
205, 059	Daniels, William B., Harlan, Ind. Platform-scales	Jan. 22, 1878	671	197	13	128
199, 963	Dann, Isaac N., and Edwin Kelsey, assignor to New Haven Folding Chair Company, New Haven, Conn. Chair	June 18, 1878	680	{ 199 } { 200 }	{ 13 }	1109
202, 001	Dann, Thomas, Montreal, Quebec, Canada. Last	Feb. 5, 1878	74	24	13	245
201, 098	Dansreau, Hercule. (See Townsend, Edward E., assignor.)					
202, 001	Danzig, Abram A., New York, N. Y. Under-garment	Apr. 2, 1878	138	40	13	619
208, 718	Darby, William, assignor of one-half interest to F. B. Moffitt, Chillicothe, Ill. Ridge-saddle for roofs	Mar. 12, 1878	282	87	13	485
202, 706	Dare, Charles W. F., Brooklyn, N. Y. Canopy-top for children's carriages	Oct. 8, 1878	280	80	14	534
200, 160	Darling, Daniel D., Leroy L. Parshall, and Fred H. Wendell, Coldwater, Mich. Feed-steamer	Apr. 23, 1878	933	267	13	741
202, 002	Darling, Daniel S., Brooklyn, N. Y. Horseshoe	Feb. 12, 1878	297	89	13	287
202, 002	Darling, Edwin P., Rockton, Ill. Clothes-drier	Apr. 2, 1878	139	40	13	619
202, 003	Darling, Isaac, Norwalk, Ohio. Wash-board	Apr. 2, 1878	140	40, 41	13	619
208, 298	Darling, Jeremiah, Cincinnati, Ohio. Rotary engine	Sept. 24, 1878	790	230	14	461
201, 598	Darling, Samuel, Providence, R. I. Railway-car window	Mar. 26, 1878	832	252	13	533
209, 332	Darling, Samuel, Providence, R. I. Stove-oven	Oct. 29, 1878	973	283	14	639
199, 272	Darozir, Levi, Natick, Mass. Last	Jan. 15, 1878	575	168	13	105
209, 113	Darrah, Samuel A., Newark, N. J. Last-channeling machine	Oct. 22, 1878	743	216	14	604
202, 794	Darrah, Samuel A., Newark, N. J. Whip-rack	Apr. 23, 1878	1021	293	13	752
204, 300	Darrah, Samuel A., Newark, N. J. Spherical target	May 28, 1878	1166	332	13	991
207, 396	Darrow, Jay F. (See Waring, Darrow & Winters.)					
208, 159	Dasey, John H., Somerville, Mass. Game-counter	Aug. 27, 1878	790	235	14	318
200, 376	Daehliel, Rudolphus S., Greensborough, N. C. Compound for preserving food	Sept. 17, 1878	629	.....	14	438
203, 427	Daud, Oliver A. (See Winston, Alexander, assignor.)					
208, 674	Daughtrey, William Triplett, assignor of one-half interest to W. W. McCollum, Selma, Ala. Insect-exterminator	Feb. 10, 1878	508	150	13	327
203, 427	Daul, Anthony, assignor of one-half interest to Rudolph Van Baar. Envelope	May 7, 1878	201	58	13	848
208, 674	Daum, Frederick E. (See Whiting & Daum.)					
208, 674	Daumesnil, Albert Paul, Paris, France. Coating and preserving metals	Oct. 8, 1878	233	.....	14	528
200, 262	Dauntless Manufacturing Company. (See Perkins, Nahum Simeon Cary, assignor.)					
200, 262	D'Augia, Luigi, Baltimore, Md. Adjustable music-holder	Feb. 12, 1878	380	112	13	300
199, 803	Dauth, John P., assignor of one-half interest to Francis J. Obert, Reading, Pa. Heater	Jan. 29, 1878	1142	335	13	210
205, 840	Davenport, E. W., et al. (See Beckwith, Amos, assignor.)					
201, 503	Davenport, John W., Cumberland City, assignor of one-half interest to J. H. Sullivan, Shiloh, Tenn. Shingle-shaving machine	July 9, 1878	422	120	14	66
199, 964	Davenport, Montague, Finsbury, London, Great Britain. Gate-latch	Mar. 19, 1878	712	217	13	533
200, 263	Davenport, Walter J., et al. (See Patterson, William W., assignor.)	Feb. 5, 1878	75	24	13	245
200, 263	Daverio, Gustav, Oberstrass, near Zurich, Switzerland. Crushing-roll	Feb. 12, 1878	380	{ 112 } { 113 }	{ 13 }	300
201, 754	Davey, John R. (See Crawley, Edwin, assignor.)					
201, 754	Davidson Brothers. (See Healey, James L., assignor.)					
201, 755	Davidson, Otis E., Clarksville, Tenn. Paper-bag machine	Mar. 26, 1878	978	299	13	575
202, 243	Davidson, Otis E., Clarksville, Tenn. Paper-bag machine	Mar. 26, 1878	979	299	13	575
201, 654	Davidson Rubber Company. (See Weed, Charles, assignor.)					
8, 504	Davies, David J. H., Ogdensburg, N. Y. Steam washing-machine	Apr. 9, 1878	410	119	13	661
199, 804	Davies, Edward, Brooklyn, N. Y. Device for sizing rings	Mar. 26, 1878	885	269	13	561
202, 005	Davies, Henry J. (See Davies & Lambert, assignors.)					
202, 705	Davies, Henry J., Brooklyn, N. Y. Clock-case	Nov. 26, 1878	958	.....	14	819
202, 705	Davies, Henry J., and Walter D., Brooklyn, N. Y. Pendulum-clock	Jan. 29, 1878	1143	335	13	210
209, 869	Davies, Henry J., Brooklyn, N. Y. Clock-case	Apr. 9, 1878	252	74	13	639
207, 107	Davies, Henry J., and Walter D., Brooklyn, N. Y. Clock	Apr. 23, 1878	1022	293	13	733
203, 325	Davies, John P., assignor of one-half interest to Robert R. Williams, Chicago, Ill. Meat-tender	Nov. 12, 1878	367	103	14	724
207, 397	Davies, John P., assignor of one-half interest to Robert R. Williams, Chicago, Ill. Meat-tender	Aug. 20, 1878	484	145	14	274
210, 923	Davies, Joshua, Muskegon, Mich. Grain-separator	May 7, 1878	96	57	13	833
202, 416	Davies, Thomas, Jr. (See Tyler, John B., assignor.)	Apr. 27, 1878	790	235	14	318
200, 518	Davies, Walter D. (See Davies, Henry J., and Walter D.)					
201, 600	Davies, William, Henderson, Ky. Tobacco stripping and drying machine	Dec. 17, 1878	609	168	14	919
206, 934	Davis, Abbott R., Boston, Mass. Removing the skin of potatoes machine	Apr. 10, 1878	599	176	13	692
201, 600	Davis, William, Henderson, Ky. Tobacco stripping and drying machine	Feb. 19, 1878	641	179	13	348
206, 934	Davis, William, Henderson, Ky. Tobacco stripping and drying machine	May 14, 1878	398	113	13	861
206, 934	Davis, William, Henderson, Ky. Tobacco stripping and drying machine	Aug. 13, 1878	300	91	14	247

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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209, 665	Davis, Adolphus, assignor of one-half interest to Henry Shackell, Montreal, Quebec, Canada. Spark-arrester for locomotives .....	Nov. 5, 1878	142	42	14	700
204, 543	Davis, Albert T. L., Lake Village, N. C. Folding chair .....	June 4, 1878	111	38	13	1028
205, 250	Davis, Alexander S., Jersey City, N. J., assignor of one-half interest to George M. Law, New York, N. Y. Picture-frame .....	June 25, 1878	891	264	13	1142
	Davis, Ambrose L. (See Davis, Levi A., and Ambrose L.) .....					
201, 163	Davis, Andrew B., Ithaca, N. Y. Fastener for coffins, &c .....	Mar. 12, 1873	346	107	13	474
207, 108	Davis, Andrew J., Hartford, Mich. Scrubbing device .....	Aug. 20, 1878	485	145	14	274
209, 468	Davis, Andrew J., Allegheny, Pa. Automatic toy .....	Oct. 29, 1878	1113	{ 324 325 }	14	659
207, 799	Davis, Ansel B., Mayfield, Mich. Water-elevator .....	Sept. 10, 1878	230	72	14	381
211, 000	Davis, Augustus B., Philadelphia, Pa. Car-spring .....	Dec. 17, 1878	697	192	14	930
206, 088	Davis, Biram C., Binghamton, N. Y. Shutter .....	July 16, 1878	690	{ 199 200 }	14	105
200, 377	Davis, Charles S., assignor to Washburn & Moen Manufacturing Company, Worcester, Mass. Fence-wire stretcher .....	Feb. 19, 1878	510	150	13	327
	Davis, Charles W. (See Davis, Henry C. and Charles W.) .....					
200, 789	Davis, Daniel Vestel, Mocksville, N. C. Apparatus for curing tobacco .....	Feb. 26, 1878	936	276	13	400
	Davis, Edgar P. (See Muldoon & Davis.) .....					
209, 237	Davis, Edgar Pulaski, and Walter John Godfrey, Omaha, Nebr. Mold for casting sash-weights .....	Oct. 22, 1878	869	252	14	621
	Davis, Edward P., et al. (See Heckmann, Louis, assignor) .....					
	Same .....					
	Davis, Edward P. (See Hudson, Richard, assignor.) .....					
202, 158	Davis, Frank, North Adams, Mass. Door-bolt .....	Apr. 9, 1878	327	96	13	649
199, 191	Davis, Frank B., assignor to Cambria Iron Company, Johnstown, Pa. Nut-lock .....	Jan. 15, 1878	497	146	13	94
200, 437	Davis, Frederick B., Chicago, Ill. Soldering device .....	Feb. 19, 1878	567	107	13	336
201, 504	Davis, General, Silver Run, assignor to S. G. Jenkins, Talladega County, Ala. Fish and animal trap .....	Mar. 19, 1878	712	217	13	533
	Davis, George G., et al. (See Baldwin, Eben A., assignor.) .....					
	Same .....					
	Davis, George L., et al. (See Baldwin, Eben A., assignor.) .....					
	Same .....					
	Davis, George M. (See Upton, William H., assignor.) .....					
210, 504	Davis, George M., Chicago, Ill. Piston-rod and valve-stem packing .....	Dec. 3, 1878	118	30, 31	14	839
	Davis, George W., et al. (See Palmer, Charles, assignor.) .....					
	Davis, H. T. (See Wood, George W., assignor.) .....					
208, 799	Davis, Henry C. and Charles W., Philadelphia, Pa. Hand-protector .....	Oct. 8, 1878	372	106	14	546
198, 797	Davis, Henry T., Sherman, Tex. Churn .....	Jan. 1, 1878	80	21	13	20
203, 895	Davis, Hilas D., assignor to George L. Davis, John A. Wiley, Joseph M. Stone, George G. Davis, Joseph H. Stone, and James H. Davis, North Andover, Mass. Loom .....	May 21, 1878	712	204	13	930
210, 758	Davis, Ira S., Ypsilanti, Mich. Spring-hinge .....	Dec. 10, 1878	405	111	14	884
199, 273	Davis, Jacob W., San Francisco, Cal. Pantaloon .....	Jan. 15, 1878	576	168	13	105
203, 248	Davis, James A., William D. Guseman, and Horatio D. McGeorge, Morgantown, W. Va. Harrow .....	May 7, 1878	11	5	13	822
	Davis, James H., et al. (See Baldwin, Eben A., assignor.) .....					
	Same .....					
	Davis, James Madison. (See Smith & Davis.) .....					
8, 176	Davis, Job A., Watertown, N. Y. Rufling attachment for sewing-machines (Reissue) ..	Apr. 16, 1878	831	240	13	720
208, 967	Davis, Job A., Boston, Mass. Sewing-machine .....	Oct. 15, 1878	565	165	14	575
210, 737	Davis, John, and Charles Beerman, Atlanta, Ga. Fence .....	Dec. 10, 1878	404	111	14	884
207, 952	Davis, John M., Raleigh, N. C. Coffee-pot .....	Sept. 10, 1878	395	119	14	402
209, 385	Davis, John R., Inland, Ohio. Device for teaching involution and evolution .....	Oct. 29, 1878	1029	299	14	647
202, 417	Davis, John Rolph, Bloomfield, Iowa. Well boring and drilling apparatus .....	Apr. 16, 1878	609	177	13	632
	Davis, John W. (See Listeman, Philip, assignor.) .....					
	Davis, Joseph H. (See Miller, Aaron H., assignor.) .....					
	Davis, Julia H. (See Davis, Theodore D., assignor.) .....					
202, 707	Davis, Julius C., Oskaloosa, Iowa. Mechanical movement .....	Apr. 23, 1878	935	267	13	741
210, 925	Davis, Levi A. and Ambrose L., Binghamton, N. Y. Vehicle-spring .....	Dec. 17, 1878	611	169	14	920
202, 005	Davis, Mark, and Sale Simonson, New York, N. Y. Hat and cap .....	Apr. 2, 1878	142	41	13	619
209, 960	Davis, Michael F., Portland, Me. Outtrigger-boat .....	Nov. 19, 1878	472	{ 142 143 }	14	751
	Davis, Milton. (See Dominy, Ezra, assignor.) .....					
208, 077	Davis, Montgomery R., Jackson, Mich. Spring bed-bottom .....	Sept. 17, 1878	537	160	14	426
205, 060	Davis, Nelson, Ida, Mich. Wire basket .....	June 18, 1878	682	200	13	1109
	Davis, Oscar F. (See Rotschka & Davis.) .....					
	Davis, Philip F., et al. (See Long, Nathan H., assignor.) .....					
	Davis, Richard. (See Jones, John, assignor.) .....					
	Davis, Richard V. (See Muehling & Davis.) .....					
203, 122	Davis, Samuel B., Hamburg, Iowa. Seed-planter .....	Apr. 30, 1878	1362	397	13	801
210, 104	Davis, Samuel W., Wilmington, Del. Drill-stand .....	Nov. 19, 1878	630	187	14	772
204, 952	Davis, Solomon, New York, N. Y. Fire-escape ladder .....	June 18, 1878	577	169	13	1095
	Davis, Spencer E. (See Van Brunt & Davis.) .....					
	Davis, Stephen A. (See Blake & Davis.) .....					
	Davis, T. B. (See McChesney, Reuben, assignor.) .....					
210, 924	Davis, Theodore D., assignor to Julia H. Davis, Syracuse, N. Y. Lawn-rake .....	Dec. 17, 1878	610	169	14	919
209, 607	Davis, Thomas Jefferson, Fair Haven, N. Y. Potato-planter .....	Nov. 5, 1878	74	21, 22	14	690
	Davis, Thomas K., et al. (See Palmer, Charles, assignor.) .....					
	Davis, Thomas W. (See Kessler, Peter, assignor.) .....					
208, 664	Davis, Van R. Buchanan, assignor of two-thirds interest to A. J. C. and W. A. Westbrook, Rock Mart, Ga. Plow-stock .....	Oct. 1, 1878	214	61	14	517
202, 242	Davis, Waters S., Galveston, Tex. Bale-tie .....	Apr. 9, 1878	409	119	13	661
	Davis, Wiley. (See Rogers, Elbert H., assignor.) .....					
200, 264	Davis, William E., Port Huron, Mich. Railway-ticket .....	Feb. 12, 1878	382	113	13	300
209, 236	Davis, William M., Baltimore, Md. Crane for hoisting car-wheels, &c .....	Oct. 22, 1878	868	252	14	621
204, 138	Davis, William O., Bloomington, Ill. Writing-tablet .....	May 28, 1878	994	283	13	969
208, 966	Same .....	Oct. 15, 1878	564	165	14	575
208, 378	Davis, William R., jr., New York, N. Y. Library table .....	Sept. 24, 1878	870	253	14	471
201, 164	Davis, William S., assignor of one-half interest to Warren C. Parks, Pittsfield, Me. Pump .....	Mar. 12, 1878	347	107	13	474
206, 544	Davis, William Wellman, and Freeman Patterson Wilson, Minneapolis, Minn. Potato-separator .....	July 30, 1878	1237	356	14	181
204, 544	Davison, Darius, New York, N. Y. Gas-retort .....	June 4, 1878	112	38	13	1028
	Davison, G. H. (See Batty, Joseph W., assignor.) .....					
	Davol, Joseph. (See Bliss & Davol.) .....					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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201, 796	Dawes, Frederick S., Hudson, Mass. Counter-stiffener for boots and shoes .....	Mar. 26, 1878	1023	312	13	581
	Dawson, David R. ( <i>See</i> Martin, Dawson & Orchar.) .....					
205, 251	Dawson, James, Brooklyn, N. Y. Attachment for hose .....	June 25, 1878	892	264	13	1142
205, 363	Dawson, James W., Chicago, Ill. Pessary .....	June 25, 1878	1015	300	13	1158
200, 181	Dawson, John, Williamsburg, N. Y. Commode-chair .....	Feb. 12, 1878	299	89	13	287
205, 841	Dawson, Patrick C., Providence, R. I. Box for water-closet paper .....	July 9, 1878	422	120	14	66
205, 733	Dawson, Samuel, Hempstead, N. Y. Filter and irrigating nozzle .....	July 9, 1878	306	90	14	51
204, 953	Dawson, Walter, Scranton, Pa. Feed-water heater .....	June 18, 1878	578	169	13	1095
8, 388	Day, Augustus, Detroit, Mich. Track-clearer .....	Aug. 27, 1878	1003	293	14	244
204, 205	Same .....	( <i>Reissue</i> ) .....				
210, 405	Day, Austin G., New York, N. Y. Combination of vegetable oils and grahamite for the manufacture of vulcanized compounds .....	May 28, 1878	1071	305	13	979
210, 406	Same .....	Dec. 3, 1878	15		14	827
210, 407	Same .....	Dec. 3, 1878	16		14	827
210, 408	Same .....	Dec. 3, 1878	17		14	827
210, 409	Same .....	Dec. 3, 1878	18		14	827
210, 410	Same .....	Dec. 3, 1878	20		14	827
210, 411	Same .....	Dec. 3, 1878	21		14	827
190, 417	Day, Eugene Sue. ( <i>See</i> Schramling & Day.) .....	Dec. 3, 1878	22		14	827
	Day, Joseph, Brooklyn, N. Y. Corset-spring .....	Jan. 22, 1878	730	215	13	138
190, 192	Day, Joseph C. ( <i>See</i> Schramling & Day, assignors.) .....					
	Day, Joshua D., assignor to self, Daniel T. Ames, New York, N. Y., and Charles C. Tainter, Elizabeth, N. J. Spacing T-squares .....	Jan. 15, 1878	498	146	13	94
203, 249	Day, Oscar B. ( <i>See</i> Moss & Day.) .....					
208, 160	Day, Thomas H., San Francisco, Cal. Rope tramway and apparatus .....	May 7, 1878	12	5	13	822
	Day, William H. H., assignor of one-fourth interest to Augustus A. Menzie, Angola, Ind. Station-indicator .....	Sept. 17, 1878	629	185	14	438
203, 712	Day, William S. ( <i>See</i> Edgar & Day.) .....					
203, 896	Daymon, John, Eddystone, Pa. Detergent composition .....	May 14, 1878	513		13	897
	Dayton, John A., Brooklyn, N. Y. Machine for veneering moldings .....	May 21, 1878	714	205	13	930
201, 873	Dayton Machine Company. ( <i>See</i> Aldrich, Wales, assignor.) .....					
	Denderick, Chalmers, Knoxville, Tenn. Vehicle-wheel .....	Apr. 2, 1878	16	4	13	601
201, 756	Deadly, Walter. ( <i>See</i> Montstorm, William, assignor.) .....					
206, 426	Dealy, William H., assignor to W. H. Grove, Philadelphia, Pa. Show-case .....	Mar. 26, 1878	980	300	13	575
209, 027	Dean, Andrew B., Louisville, Ky. Concrete pavement .....	July 30, 1878	1118	320	14	166
201, 166	Dean, Asahel H., and Albert C. Pike, Philadelphia, Pa. Double-acting lift-pump .....	Oct. 15, 1878	631	183	14	584
202, 244	Dean, George B., assignor to self and M. Buhler, Lamolite, Ill. Wind-mill .....	Mar. 12, 1878	349	107	13	474
	Dean, James, Derby, England. Lady's boot .....	Apr. 9, 1878	411	119	13	661
199, 805	Dean, Jehial M. ( <i>See</i> Hadley & Deane.) .....					
201, 165	Dean, William W., Macon, Ill. Hay rake and loader .....	Jan. 29, 1878	1144	336	13	210
202, 135	Deane, Royal E., New York, N. Y. Culinary boiler .....	Mar. 12, 1878	348	107	13	474
209, 160	Dearborn, Charles P., Boston, Mass. Blind-awning .....	Apr. 30, 1878	1186	342	13	777
	Deas, Charles, and William S. Brazier, New York, N. Y. Stuffing-box and packing for valve-stems .....	Oct. 22, 1878	794	230	14	611
210, 759	Debacher, Robert, assignor to Schimper Bros., New York, N. Y. Pocket-book frame .....	Dec. 10, 1878	405	111	14	885
199, 038	De Beaumont, Alexandre, Philadelphia, Pa. Feed-water heater and condenser .....	Jan. 8, 1878	325	96	13	66
208, 666	De Beer, Johannes, Great Barrington, Mass. Steam, vapor, and medical bathing apparatus .....	Oct. 8, 1878	225	65	14	527
205, 606	De Bevoise, Abraham. ( <i>See</i> Luckenbach & De Bevoise.) .....					
	De Bevoise, Abraham, Brooklyn, and Frederic A. Luckenbach, assignors to John E. Mulford, New York, N. Y. Steaming and drying grain .....	July 2, 1878	146	44	14	28
203, 123	Deblois, Charles T., Boston, Mass. Car-window .....	Apr. 30, 1878	1363	397	13	801
207, 846	De Botton, Joseph G., Desdier Landing, La. Child's rocker .....	Sept. 10, 1878	270	86	14	388
209, 608	Decastro, Jacob William, New York, N. Y. Defecation, decolorization, and refining of saccharine liquid .....	Nov. 6, 1878	76		14	691
200, 701	De Célis, José Miguel, New York, N. Y. Fireman's hat .....	Feb. 26, 1878	854	251	13	387
200, 898	Same .....	Mar. 5, 1878	80	28	13	427
201, 167	Same .....	Mar. 12, 1878	350	108	13	475
200, 989	De Cell, George, and Amos W. Jennings, Troy, N. Y. Grate .....	Mar. 5, 1878	163	53	13	440
	Deckebach, Caroline, administratrix. ( <i>See</i> Deckebach, Frederick C.) .....					
210, 016	Deckebach, Frederick C., deceased, by Caroline Deckebach, administratrix, Cincinnati, Ohio. Beer-cooler .....	Nov. 19, 1878	536	161	14	700
204, 954	Decker, Albert, Kankakee, Ill. Fly-wheel for sewing-machines .....	June 18, 1878	579	169	13	1096
200, 988	Decker, Ansil W., Niven, Pa. Churn-power .....	Mar. 5, 1878	163	53	13	440
	Decker, Brenton. ( <i>See</i> Landon & Decker.) .....					
204, 657	Decker, George W., et al. ( <i>See</i> Atkinson, Mahlon B., assignor.) .....					
	Decker, Herman, Providence, R. I. Process of producing panoramic pictures .....	June 11, 1878	241	75	13	1050
	Decker, Joel C. ( <i>See</i> Clements & Decker.) .....					
204, 545	Decombe, Joseph, San Francisco, Cal. House .....	Nov. 4, 1878	113	39	13	1029
209, 666	Decon, Susan H., Centerville, Ohio. Fruit-jar protector .....	Nov. 5, 1878	143	42	14	700
199, 193	DeCourcy, Edward, San Francisco, Cal. Awnings .....	Jan. 15, 1878	498	147	13	94
201, 228	Dederick, Ezra, Milwaukee, Wis. Grain-binder .....	Mar. 12, 1878	411	126	13	483
209, 609	Same .....	Nov. 5, 1878	77	22	14	691
8, 130	Dederick, Peter K., Albany, N. Y. Hay and cotton press .....	Mar. 19, 1878	811	247	13	546
8, 252	Same .....	( <i>Reissue</i> ) .....				
8, 296	Same .....	( <i>Reissue</i> ) .....				
8, 311	Same .....	( <i>Reissue</i> ) .....				
8, 312	Same .....	( <i>Reissue</i> ) .....				
8, 316	Same .....	( <i>Reissue</i> ) .....				
8, 317	Same .....	( <i>Reissue</i> ) .....				
205, 734	Same .....	( <i>Reissue</i> ) .....				
205, 735	Same .....	( <i>Reissue</i> ) .....				
205, 736	Same .....	( <i>Reissue</i> ) .....				
205, 737	Same .....	( <i>Reissue</i> ) .....				
206, 865	Same .....	( <i>Reissue</i> ) .....				
205, 842	Dedolph, Frederick, Saint Paul, Minn. Attachment for coal-stoves .....	Aug. 13, 1878	229	73	14	239
210, 505	Dee, Henry William, Sherwood street, Golden Square, Middlesex County, England. Bottle-stopper fastener .....	July 9, 1878	423	120	14	66
210, 675	Deeble, John, assignor of one-half interest to J. B. Savage, Southington, Conn. Vehicle fifth-wheel .....	Dec. 3, 1878	120	31, 32	14	839
204, 231	Deeds, John Burnett, Terre Haute, Ind. Car-mover .....	Dec. 10, 1878	322	88	14	874
204, 705	Deeley, Robert, and John Turl, assignors to Lesm's Pascual, New York, N. Y. Portable railway .....	July 23, 1878	873	249	14	131
	Deere & Mansur Company. ( <i>See</i> Runstetter, Andrew and Michael, assignors.) .....	Aug. 6, 1878	50	15	14	213
	Deering, John W., et al. ( <i>See</i> Taylor, Edmund B., assignor.) .....					

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. E.	Vol.	Page.
190, 623	Deering, Mark L., Cleveland, Ohio, assignor of one-half interest to Julius T. Edson. Machine for planing barrels	Jan. 29, 1878	907	281	13	183
208, 719	Deering, Michael, assignor of three-fourths interest to Christopher C. Bradley, Syracuse, N. Y. Power-bammer	Oct. 8, 1878	281	80	14	534
190, 624	De Forest, David W., Brooklyn, N. Y. Marking-frame for plug-tobacco	Jan. 29, 1878	669	282	13	183
202, 245	De Forest, David William, Brooklyn, N. Y. Manufacturer of plug-tobacco	Apr. 9, 1878	412	120	13	661
8, 378	De Forest, Thomas B. and Thomas S. Gilbert, assignors, by mesne assignments, to R. N. Bassett, Birmingham, Conn. Skirt-hoop	Aug. 20, 1878	714	213	14	303
202, 524	De Forest, Thomas B., Birmingham Conn. Shovel	Apr. 16, 1878	705	205	13	706
203, 428	Same. Machine for tipping corset-springs	May 7, 1878	201	58	13	848
207, 398	Degen, Frederic William, New Athens, Ill. Sulky-cultivator	Aug. 27, 1878	791	235	14	318
209, 667	Dehart, Thomas, Meadows of Dan, Va. Water-wheel	Nov. 5, 1878	144	42	14	700
	Dehncl, Louis O. (See Heimlich & Dehncl.)					
	Dehouck, Henry. (See Hutchinson & Dehouck.)					
	Deihl, Hugh M. (See Drabble & Deihl) (Reissue.)					
200, 114	Deiterich Charles F., Baltimore, Md. Gas-generating furnace	Oct. 22, 1878	744	{ 216 217 }	14	604
	Delameter, Cornelius H., et al. (See Reynolds, George H., assignor.)					
201, 229	De La Montagnie, Albert, New York, N. Y. Machine for pressing sugar	Mar. 12, 1878	412	{ 126 127 }	13	483
	Deland, James, et al. (See Sparkes, James Henry, assignor.)					
209, 668	Delaney, Alexander, Richmond, Va. Spark-arrester	Nov. 5, 1878	145	42	14	700
202, 096	Delaney, Matthew, New York, N. Y. Electro-magnetic piano-action	Apr. 9, 1878	253	74	13	639
203, 005	Delano, Benjamin F., Boston, Mass. Ventilating ships	Apr. 30, 1878	1251	362	13	786
207, 505	Same. Construction of vessels	Aug. 27, 1878	905	267	14	332
205, 252	Delmy, Thomas, Geneva, N. Y. Strawberry-protector	June 25, 1878	893	264	13	1142
200, 182	De La Peyrouse, Louis A. L. E. P., London, England. Manufacturing gas	Feb. 12, 1878	299	80, 90	13	288
209, 203	De La Vega, Miguel, assignor of one-half interest to Santiago Lima, New York, N. Y. Manufacture of artificial tallow	Oct. 22, 1878	840		14	617
	Delavière, Albert. (See Salmon & Delavière.)					
200, 438	Delay, Michael R., Helena, Mont. Car-coupling	Feb. 19, 1878	568	167	13	336
203, 819	De Lime, Louis A., Frankfort, Ky. Grain-masher	May 21, 1878	638	179	13	920
206, 092	Delinger, David C., Red Oak, Ohio. Gate	July 16, 1878	695	201	14	106
202, 446	Delisser, George P., Brooklyn, assignor of two-thirds interest to Adams & Shaler, New York, N. Y. Medical compound	Apr. 9, 1878	414		13	661
203, 897	Delkescamp, Adolph, and Franklin B. Bradley, Southington, Conn. said Delkescamp assignor to said Bradley. Machine for arranging and feeding blanks	May 21, 1878	715	205	13	930
204, 716	Same. Machine for making eyelets	June 11, 1878	303	93, 94	13	1058
210, 676	Dell, John C., Philadelphia, Pa. Coffee-mill	Dec. 10, 1878	322	88	14	874
209, 386	Delong, Benjamin, Caughdenoy, N. Y. Grain-drill	Oct. 29, 1878	1030	299	14	647
201, 168	Delong, Elizabeth, Stone Church, Pa. Steam and fume box	Mar. 12, 1878	350	108	13	475
201, 099	D Long, George A., Weedsport, N. Y. Hilling-plow	Mar. 12, 1878	282	87, 88	13	465
200, 184	Delori, François Jean Joseph, Snaeskerke, Belgium. Apparatus for measuring, controlling, and registering liquids	Feb. 12, 1878	303	90	13	288
190, 419	De Macedo, Joaquim Antonio, Leeds, England. Time-signal	Jan. 22, 1878	732	215	13	138
190, 418	Demarest, Cantine Hasbrouck. (See Canfield & Demarest.)					
190, 806	Demarest, John, New York, N. Y. Water-closet valve	Jan. 22, 1878	731	215	13	138
	Demarest, John, assignor to J. L. Mott Iron Works, New York, N. Y. Slop-safe for water-closets	Jan. 29, 1878	1145	336	13	210
200, 870	Demarest, John, New York, N. Y. Water-closet	Nov. 12, 1878	307	{ 109 110 }	14	734
210, 677	Same. same	Dec. 10, 1878	324	88	14	874
210, 926	Demiz, Frank, and Peter Bacher, Allegheny, assignors to William Sunderman, Pittsburgh, Pa. Bottle-stopper and stopper-fastener	Dec. 17, 1878	611	169	14	920
205, 618	Deming, Osmer S., Mount Olivet, Ky. Corn-planter	July 2, 1878	157	47	14	29
203, 006	Demo, Albert, Camden, N. J. Marine engines	Apr. 30, 1878	1252	{ 362 363 }	13	786
209, 552	Demond, George W. and Louis, Brooklyn, N. Y. Chimney-top and ventilator	Nov. 5, 1878	15	5	14	683
	Demond, Louis. (See Demond, George W. and Louis.)					
207, 060	De Morambert, Felix Jullien, Paris, France. Camp-bed	Aug. 13, 1878	418	129	14	261
202, 418	De Mounie, Anédéc Thornton, assignor of one-fourth interest to Michael Kaufmann, London, England. Lock for fire-arms	Apr. 16, 1878	603	177	13	692
200, 378	Dempsey, James R., Logan County, Ky. Riding-saddle	Feb. 19, 1878	511	151	13	328
200, 330	Demuth, William, New York, N. Y. Tobacco-pipe	Feb. 5, 1878	134	44	13	254
209, 238	Denayrouze, Auguste, Paris, France. Spinning-top	Oct. 22, 1878	870	253	14	622
	Dendy, John, et al. (See Aldred, Thomas, assignor.)					
199, 521	Denio, Asa O., assignor of one-half interest to Lobdell Car Wheel Company, Wilmington, Del. Spark-arrester	Jan. 22, 1878	836	244	13	154
206, 770	Denison, Albert, Stillwater, N. Y. Apparatus for gathering potato-bugs	Aug. 6, 1878	122	38	14	222
	Denison, George A. (See Buckingham & Hamilton, assignors.)					
201, 505	Dennert, J. C., Altona, Germany. Piston water meter and motor	Mar. 19, 1878	713	217	13	533
	Dennis, Graham B. (See Dow, Eli S., assignor.)					
	Same. (See Eaton, Daniel E., assignor.) (Reissue.)					
	Dennis, Joseph S., et al. (See Betts, Lewis F., assignor.)					
	Same. (See Swedberg, Carl Johan, assignor.)					
	Dennis, Joseph S. (See Syverson, Andrew, assignor.) (Reissue.)					
	Dennis, Samuel W. (See Moreau & Dennis.)					
205, 619	Dennis, Samuel W., assignor, by mesne assignments, to self and John B. Reynolds, San Francisco, Cal. Motor for dental pluggers	July 2, 1878	159	48	14	29
211, 001	Dennison, Hosea B., Cambridge, Mass. Game-board	Dec. 17, 1878	698	192	14	930
	Dennison, Jonathan Augustus. (See Graham & Dennison.)					
190, 807	Densmore, David L., Stanton, Mich. Board rule and gage	Jan. 20, 1878	1145	336	13	210
200, 645	Densmore, Emmett, Blooming Valley, Pa., assignor of one-half interest to Horatio G. Bardwell. Fence	Feb. 26, 1878	792	233	13	378
	Denton, H. R. J. (See Riches, Charles, assignor.)					
	Denton, Solomon S., et al. (See Wallace, Edward L., assignor.)					
204, 426	Denzler, Frederick, Brooklyn, N. Y., assignor to Lamb Knitting Machine Manufacturing Company, Chicopee, Mass. Knitting-machine cam	June 4, 1878	11	5	13	1014
201, 874	Depp, Bezekiah E., Sedalia, Mo. Air and steam engine	Apr. 2, 1878	16	5	13	601
200, 990	Dermames, Hippolite A., Elizabeth, N. J. Padlock	Mar. 5, 1878	164	53	13	440
	Derby Silver Company. (See Ratcliff, Frederick, assignor.)					
208, 675	Derby, William F., Northampton, Mass. Loom	Oct. 8, 1878	234	67	14	528
205, 364	Derrickson, Andrew R., Bedford, Iowa. Hog-cholera compound	June 25, 1878	1010		13	1158
210, 600	Derrig, Frances James, Akron, Ohio. Dash-rail for vehicles	Dec. 10, 1878	238	65	14	864
206, 093	Deschamps, Francis O., Philadelphia, Pa. Driving, coupling, and braking appliance for railway-cars	July 16, 1878	695	201	14	106



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198, 873	Deesha, Robert, Meridian, and William A. Manahan, Booneville, Miss. Cotton-cleaner	Jan. 1, 1878	153	44	13	33
206, 720	Deshon, Daniel, assignor of one-half interest to F. W. Mader, Bucyrus, Ohio. Portable shower-bath	Oct. 8, 1878	282	80	14	534
208, 992	De Silva, Eduardo Claudio, Rio de Janeiro, Brazil. Feed-water-regulating valve	Oct. 15, 1878	587	171	14	579
	Detrick, Edington. (See Cushing, Harry C., assignor.)					
	Detroit Safe Company. (See Paige, David O., assignor.)					
198, 736	Detle, H. J. Lewis, assignor of two-thirds interest to Julius Cohen and Henry Milling, Buffalo, N. Y. Car-coupling	Jan. 1, 1878	4	1	13	9
202, 708	Dettmer, Frederick, Madison, Ind. Fire-escape	Apr. 23, 1878	935	267	13	741
203, 601	Deuel, Jacob, Millbrook, assignor to William H. Field, Port Chester, N. Y. Horse hay-rake	May 14, 1878	399	113	13	883
	Devault, Dick J. (See Devault, William V. and Dick J.)					
199, 808	Devault, William V. and Dick J., Johnson City, Tenn. Straw-cutter	Jan. 29, 1878	1145	336	13	210
	De Veling, John D. (See De Zeng, George A., assignor.)					
	Devenny, Lafayette. (See Griffith & Patterson, assignors) (Reissue.)					
204, 955	Deveson, Duncan, and Herman Lackmann, San Francisco, Cal. Truss	June 18, 1878	579	169	13	1096
	De Vinne, Daniel S. (See Henning, Amandus, assignor.)					
	Devlin, James. (See Banger & Hurd, assignors.)					
	Saine. (See Hurd, Lorenzo D., assignor.)					
203, 713	Devling, Hugh. (See Seanans, Bryant & Devling.)					
	Devore, Warl, California, and Samuel L. Yourtee, Cincinnati, Ohio; said Devore assignor to said Yourtee. Long center for stoves	May 14, 1878	514	146	13	897
8, 182	De Waru, Laurens E., Philadelphia, Pa. Manufacture of boots and shoes (Reissue.)	Apr. 16, 1878	838	242	13	721
200, 702	Dowe, John, Ottawa, Ontario, Canada. Postage-stamp	Feb. 26, 1878	854	251	13	387
209, 800	Deweese, Martin L., Elk City, and William W. Green, Cambridgeborough, Pa. Leather-studying compositions	Nov. 12, 1878	295		14	724
205, 365	Deweese, William H., Philadelphia, Pa. Soap-holder	June 25, 1878	1016	300	13	1158
	Dewey, Courtland A., et al. (See Underwood, Henry M., assignor.)					
207, 109	De Witt, Henry C., Chicago, Ill. Hand-washer	Aug. 20, 1878	486	146	14	274
	De Wolf, Darwin. (See Woolverton, John E., assignor.)					
	De Wolf, William H., et al. (See Wygant, John H., assignor.)					
	Dexter, Henry L. (See Tichenor & Dexter.)					
201, 230	De Yough, John, New York, N. Y. Implement for holding hot corn	Mar. 12, 1878	414	127	13	484
208, 516	De Zeng, George A., Chicago, assignor of one-half interest to John D. De Veling, Champaign, Ill. Horse-collar	Oct. 1, 1878	61	19	14	497
8, 224	D'Heuruse, Julius, Schmetzdorf, near Bernau, Prussia. Mashing grain. (Reissue.)	May 14, 1878	616	172	13	909
8, 305	Dibble Manufacturing Company. (See Dibble, William H., assignor) (Reissue.)					
	Dibble, William H., Elizabeth, assignor to Dibble Manufacturing Company, Trenton, N. J. Process of making composition articles from blood (Reissue.)	June 25, 1878	1121		13	1172
202, 636	Dibble, William H., Elizabeth, N. J. Composition for manufacturing molded articles	Apr. 23, 1878	859		13	733
202, 333	Dice, Lewis M., Chambersburg, Pa. Car-coupling	Apr. 16, 1878	520	152	13	680
207, 020	Dick, Charles J. A., and Thomas L. Luders, Philadelphia, Pa. Device for retarding the recoil of springs	Aug. 13, 1878	381	117	14	257
207, 021	Dick, Charles J. A., assignor to self and Thomas L. Luders, Philadelphia, Pa. Device for retarding the recoil of springs	Aug. 13, 1878	382	117	14	257
	Dick, Charles James A. (See Freudenberg, Franz B., assignor.)					
210, 842	Dick, Robert, Buffalo, N. Y. Folding chair	Dec. 17, 1878	504	142	14	907
201, 915	Dick, Sampson P., and David R. Musselman, Louisville, Ky. Plug-tobacco cutter	Apr. 2, 1878	57	15	13	607
210, 302	Dickason, Alexander R., Lyndon, Kans., assignor to self and Charles Braun. Washing-machine	Nov. 26, 1878	852	251	14	806
205, 061	Dickerman, Amos, assignor to Mallory, Wheeler & Co., New Haven, Conn. Knob attachment	June 18, 1878	683	200	13	1109
200, 519	Dickens, John, Kingston, N. J. Wagon-axle sleeve	Feb. 19, 1878	643	190	13	348
	Dickens, Joseph F. (See Hartley & Dickens.)					
208, 575	Dickenson, Charles, Portland, Oreg. Life-boat	Oct. 1, 1878	123	36	14	506
204, 139	Dickerman, Charles C., Boston, Mass. Lock	May 28, 1878	995	283	13	909
	Dickerson, Charles M. (See McConnell & Dickerson.)					
199, 357	Dickerson, Edwin N., New York, N. Y. Air-filter for houses	Jan. 22, 1878	672	197	13	128
211, 002	Dickerson, Woodson, and William H. Strain, assignors of one-fourth interest to John Taylor, Summerville, Ga. Plow	Dec. 17, 1878	609	192	14	980
205, 843	Dickey, Aaron F., Somerset, Pa. Combined square, bevel, &c	July 9, 1878	424	121	14	66
	Dickey, George. (See McKittrick, Alexander H., assignor.)					
	Dickey, Jonathan. (See Thompson, Dickey & Watts.)					
203, 124	Dickey, William D., assignor to self and Handren & Ripley, New York, N. Y. Pressure-regulator	Apr. 30, 1878	1365	398	13	801
208, 576	Dickey, William H., Jackson, Mich. Cultivator	Oct. 1, 1878	124	36	14	506
207, 854	Dickinson, Charles W., Belleville, N. J. Type-case	Sept. 10, 1878	291	89	14	389
202, 247	Dickinson, George W., Charlestown, Ill. Window-sash	Apr. 9, 1878	415	120	12	661
209, 610	Dickinson, Samuel V., Buffalo, N. Y. Electric apparatus for opening doors of engine-houses	Nov. 5, 1878	78	22, 23	14	691
201, 335	Dickinson, William, Rockford, Ill. Attaching calks to horseshoes	Mar. 19, 1878	545	167	13	509
210, 760	Dickinson, William, Saint Cloud, Minn. Motor	Dec. 10, 1878	406	{ 111 112 }	14	885
208, 078	Dickson, Perry, Spearfish City, Dak. Irrigating apparatus	Sept. 17, 1878	537	161	14	426
199, 420	Didden, Clemens A., Washington, D. C. Composition for black mortar	Jan. 22, 1878	733		13	138
205, 949	Dieckmann, Diedrich L., New York, N. Y. Fire-escape	July 16, 1878	550	{ 156 157 }	14	88
207, 399	Dieckmann, Diedrich L., and Friedrich Burgau, New York, N. Y. Fountain-pen	Aug. 27, 1878	793	236	14	218
	Diehl, Phillip. (See Miller & Diehl.)					
200, 606	Diehl, Phillip, Elizabeth, N. J., assignor to Singer Manufacturing Company, New York, N. Y. Sewing-machine shuttle	Feb. 26, 1878	753	221	13	372
	Diehlmann, John G. (See Doll, Rieder & Diehlmann.)					
	Diehelt, Herman, et al. (See Eisenhardt, George F., assignor.)					
	Diepenbrock, A. (See McCarthy, Jeremiah, assignor.)					
208, 721	Dietscher, Ferdinand, New York, N. Y. Guard for bedsteads	Oct. 8, 1878	283	81	14	534
199, 030	Dietsch, Franz, Murten, Switzerland. Manufacture of tartaric acid	Jan. 8, 1878	326		13	66
203, 602	Dietsch, Anton, Chicago, Ill. Rocking-chair	May 14, 1878	400	113	12	883
200, 991	Dietz, Alanson F., Guildersland Centre, N. Y. Bottle-stopper	Mar. 5, 1878	166	54	13	441
203, 007	Dietz, Alonzo E., Brooklyn, N. Y. Latch	Apr. 30, 1878	1254	363	13	796
	Dietz, Robert E. (See Pond, Henry E., assignor) (Reissue.)					
199, 696	Dikeman, John, Brooklyn, N. Y. Sewer-valve	Jan. 29, 1878	1041	304	13	194
210, 243	Dildine, John, Milton, Pa. Adjustable sieve	Nov. 26, 1878	790	234	14	797
	Dildine, Robert G. (See Sanders, Dildine & Head.)					
199, 522	Dill, Joseph, Boston, assignor to Ezra H. Brabrook, Cambridge, Mass. Marquetry	Jan. 22, 1878	836	244	13	155

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209, 387	Dillmeier, Michael, Dobbs Ferry, N. Y. Cigar-slitter .....	Oct. 29, 1878	1032	300	14	647
203, 008	Dillon, George May, Chateaugay Lake, assignor to Gardner Pope, Glen's Falls, N. Y. Hammer for charcoal-blooms, cast billets, &c. ....	Apr. 30, 1878	1255	363	13	786
209, 752	Dillon, James M., Wheeling, W. Va. Stump-extractor .....	Nov. 12, 1878	246	73	14	718
202, 709	Dillon, James Walker, assignor of one-third interest to E. L. Buckingham, Virginia City, Nev. Machine for drying slimes .....	Apr. 23, 1878	936	267	13	741
209, 871	Dillon, Patrick, and Frank Tracy, Milford, Mass. Sand-paper roll .....	Nov. 12, 1878	368	110	14	734
207, 110	Dillon, Thomas, Malden, assignor to J. F. Bowdich, Revere, Mass. Brush .....	Aug. 20, 1878	486	146	14	274
206, 706	Dilsaver, John E., Brazil, Ind. Steak-mangle .....	Aug. 6, 1878	50	16	14	213
205, 253	Dilworth, F. A., et al. (See Aldridge, Hiram, assignor.)					
	Dimelon, John, assignor to Theresa Martin, Austin, Tex. Manufacture of hydraulic cement .....	June 25, 1878	894	.....	13	1142
	Dimmick, William H. (See Vandenburg, Limbrick W., assignor.)					
	Dimock, Gould & Co. (See Jaques, John F., assignor.)					
203, 603	Dimond, George H. (See Young & Dimond.)					
206, 667	Dimond, George H., Bridgeport, Conn. Manufacture of hats .....	May 14, 1878	400	113	13	883
	Dimond, George H., and Samuel D. Castle, Bridgeport, Conn. Fur-controlling guide for sewing-machines .....	Aug. 6, 1878	9	3	14	208
207, 400	Dimond, George H., assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Bobbin-holder .....	Aug. 27, 1878	794	236	.....	318
209, 333	Dimond, George H., and Samuel D. Castle, Bridgeport, Conn. Lined fur robe .....	Oct. 29, 1878	975	284	14	639
209, 872	Dimond, George H., Bridgeport, Conn. Sweat-leather for hats .....	Nov. 12, 1878	369	110	14	734
200, 439	Dingee, William W., assignor to Sawyer Manufacturing Company, Oshkosh, Wis. Horse-power .....	Feb. 19, 1878	560	168	13	336
207, 506	Dingens, Joseph A., et al. (See Hempel, Henry A., assignor.) (Reissue.)					
	Dingley, Amasa and Amasa I., Brooklyn, N. Y. Machine for drilling and pumping oil-wells .....	Aug. 27, 1878	906	267	14	332
203, 009	Dingley, Amasa I. (See Dingley, Amasa and Amasa I.)					
210, 244	Dingley, Ephraim H., New York, N. Y. Automatic cut-off for plane-valve engines .....	Apr. 30, 1878	1256	364	13	786
210, 843	Same..... Railway-track .....	Nov. 26, 1878	790	234	14	797
200, 265	Dinkel, George, Jersey City, N. J., and Ferdinand Rochow, Brooklyn, N. Y. Feed-water regulator .....	Dec. 17, 1878	505	142	14	907
	Dinkie, Charles Frederick, and Charles Rollins Woodward, Carlisle, Pa. Dumping-wagon .....	Feb. 12, 1878	383	113	13	300
207, 507	Disbrow, Andrew M., Grafton, Ill. Thimble-skein .....	Aug. 27, 1878	907	267	14	332
205, 478	Disston & Sons, Henry. (See Bevan, Samuel, assignor.)					
206, 392	Dithridge, Edward D., Allegheny, assignor to self and Dithridge Glass Company (limited), Pittsburgh, Pa. Manufacture of glass lamp-chimneys .....	July 2, 1878	15	5	14	11
	Dithridge, Edward D., Allegheny, Pa. Apparatus for frosting glassware .....	July 30, 1878	1080	308	14	161
202, 710	Dittrich, Adolph, St. Luke's, England. Umbrella-tip cup .....	Apr. 23, 1878	936	268	13	741
200, 646	Divers, John K., et al. (See Hill, Nathan, assignor.)					
209, 628	Divoll, James G., San Francisco, Cal. Car-truck .....	Oct. 26, 1878	793	233	13	379
205, 062	Dix, Samuel C., Neponset, Ill. Sulky-harrow .....	Feb. 15, 1878	632	183	14	584
205, 788	Dixon, E., et al. (See Gesswein, Frederick W., assignor.)					
199, 423	Dixon, Ezra, Bristol, R. I. Drawing-roll saddle .....	June 18, 1878	683	201	13	1109
201, 757	Dixon, George Washington, Spring Lake, Mich. Slide and steam valve .....	July 9, 1878	306	106	14	58
202, 419	Dixon, Henry and Frank W. Unverferth, Dayton, Ohio. Stove-pipe thimble .....	Jan. 22, 1878	734	216	13	138
200, 647	Dixon, John W., West Manayunk, Pa. Paper-making machine .....	Mar. 26, 1878	981	300	13	576
	Dixon, Samuel W., Findlay, Ohio. Fire-place .....	Apr. 16, 1878	605	177	13	692
	Dixon, Stephen, London, England. Bustle and pannier .....	Feb. 26, 1878	795	234	13	379
207, 720	Dixon, W., et al. (See Gesswein, Frederick W., assignor.)					
200, 829	Dixon, Stephen, Roseville, Ill. Sulky-plow .....	Sept. 3, 1878	139	42	14	367
199, 404	Dixon, Westly, and Benjamin W. Records, Walton, Ky. Sawing-machine .....	Mar. 5, 1878	81	28	13	428
203, 898	Doak, Horace, Lowell, Mass. Bobbin-holder for spooling-machines .....	Jan. 8, 1878	327	96	13	66
207, 953	Doak, Thomas, Cameron, Mo. Tree-protector .....	May 21, 1878	718	206	13	930
	Doane, Edmund M. (See Doane, Rollin C., assignor.)					
206, 707	Doane, Rollin C., assignor of one-half interest to Edmund M. Doane, Rochester, N. Y. Blacking-brush .....	Sept. 10, 1878	396	120	14	402
202, 097	Doane, Truman P., New York, N. Y. Orange-peeler .....	Aug. 6, 1878	51	16	14	213
206, 545	Doane, W. H. (See Goodrich & Colburn, assignors.) (Reissue.)					
	Doane, Willard A., Rochester, N. Y. Machine for making paper-pulp from wood .....	Apr. 9, 1878	255	75	13	640
	Doane, William H., assignor to J. A. Fay & Co., Cincinnati, Ohio. Wood-planing machine .....	July 30, 1878	1238	356	14	181
201, 506	Doane, William H., and G. W. Bugbee, assignors to J. A. Fay & Co., Cincinnati, Ohio. Machine for boring and mortising blind-stiles .....	Mar. 19, 1878	714	217 218	13	534
210, 761	Doane, William H., and George W. Bugbee, assignors to J. A. Fay & Co., Cincinnati, Ohio. Universal wood-worker .....	Dec. 10, 1878	407	112 113	14	885
210, 762	Same..... same .....	Dec. 10, 1878	409	113 114	14	885
210, 763	Same..... same .....	Dec. 10, 1878	412	114	14	886
199, 421	Dobbin, Melvin M., Sugar Grove, Ill. Harrow .....	Jan. 22, 1878	733	215	13	138
203, 604	Dobson, C. L. (See Dobson, Henry C., assignor.)					
	Dobson, Charles E., assignor of one-half interest to Henry C. Dobson, New York, N. Y. Banjo .....	May 14, 1878	401	114	13	883
200, 900	Dobson, Henry C., et al. (See Butcher, Joseph, assignor.)					
	Dobson, Henry C. (See Dobson, Charles E., assignor.)					
	Dobson, Henry C., assignor to C. I. Dobson, New York, N. Y. Banjo .....	Mar. 5, 1878	82	29	13	428
200, 440	Dobson, J. L. (See Powers, Seth Howard, assignor.)					
	Dodd, John. (See Kitty, Sebastian, assignor.)					
207, 259	Dodge, Charles P., and Charles Warren Brown, assignors, by mesne assignments, to Charles Warren Brown, trustee, Salem, Mass. Carriage-boot .....	Feb. 19, 1878	569	168	13	336
	Dodge, Cheever K., Brooklyn, N. Y. Machine for stretching belting .....	Aug. 20, 1878	638	190	14	293
199, 358	Dodge, Cyrus A. (See Caldwell, Levi, assignor.) (Reissue.)					
201, 169	Dodge, Cyrus A., Chicago, Ill. Clamp for washing-machines .....	Jan. 22, 1878	673	197	13	129
203, 250	Dodge, Cyrus A., Middlebury, Vt. Washing-machine .....	Mar. 12, 1878	351	108	13	475
205, 063	Same..... same .....	May 7, 1878	14	6	13	823
205, 366	Same..... same .....	June 18, 1878	684	201	13	1110
	Dodge, Horace N., Brooklyn, N. Y. Leather-stretching machine .....	June 25, 1878	1017	301	13	1158
199, 422	Dodge, Jasper Latham, Greene, R. I. Horseshoe .....	Aug. 27, 1878	907	268	14	332
198, 874	Dodge, John H., Jr., and William G. Mast, Normal, Ill. Corn-planter .....	Jan. 28, 1878	734	216	13	138
199, 523	Dodge, J. Wesley, Malden, Mass. Heel-burnishing machine .....	Jan. 1, 1878	154	44	13	32
		Jan. 22, 1878	837	244	13	155

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
200, 607	Dodge, Levi, Evanston, Ill., assignor to S. A. Lewis, Waterford, N. Y. Draft-equalizer for horse-powers	Feb. 26, 1878	754	221	13	373
201, 507	Dodge, Martha J. (See Parsons, Henry F., assignor.)					
	Dodge, Thomas H., assignor to Washburn & Moen Manufacturing Company, Worcester, Mass. Barbed fence-wire	Mar. 19, 1878	718	218	13	534
210, 506	Dodge, Wallace H. (See Williams & Dodge.)					
	Dodge, William W., Washington, D. C. Lock for fire-arms	Dec. 3, 1878	120	32	14	839
	Dodsworth, Samuel. (See Shoemaker & Dodsworth.)					
	Dognin & Co., C. (See Haas, Simon, assignor.)					
204, 717	Doherty, James H., et al. (See Schallenberger, George, assignor.)					
	Doherty, William Alexander, assignor of one-third interest to Michael Higgins, Fall River, Mass. Loom-shuttle attachments	June 11, 1878	305	94	13	1050
	Dohmstreich, F. Louis. (See Rivard, Maxim J., assignor.)					
204, 427	Dolan, Thomas, et al. (See Haigh, Benjamin F., assignor.)					
199, 041	Dolbear, Amos E., Somerville, Mass. Book-support	June 4, 1878	13	5	13	1014
	Dolbear, Amos Emerson, Somerville, Mass., assignor to Gold and Stock Telegraph Company, New York City. Telephone	Jan. 8, 1878	328	96	13	67
209, 753	D'Oliveira, Louis Rodriguez. (See Frezon & D'Oliveira.)					
202, 936	Doll, Anthony, Buffalo, N. Y. Tire-heating furnace	Nov. 12, 1878	247	73	14	718
	Doll, Frank, Martin Rieder, and John G. Diehlmann, Connorsville, Ind. Invalid-bedstead	Apr. 30, 1878	1186	342	13	777
202, 796	Dollard, James, Babylon, N. Y. Lining bored wells	Apr. 23, 1878	1024	293	13	753
203, 326	Dollason, Austin, and Charles L. Leonard, Factoryville, N. Y. Front gear for carriages	May 7, 1878	97	28	13	833
209, 669	Dolle, Lorenz, Baltimore, Md. Cooler for water and bottled beverages	Nov. 5, 1878	146	43	14	700
206, 777	Dolloff, Wellington P., Providence, R. I. Jewelry-fastening	Aug. 6, 1878	123	39	14	222
208, 968	Same. Ear-ring	Oct. 15, 1878	568	165	14	576
210, 017	Same. Collar and sleeve button	Nov. 19, 1878	537	161	14	760
	Domestic Refrigerator and Pipe Covering Company. (See Lewis, George H., assignor.)					
	Domestic Sewing Machine Company. (See Wild, Frederic W., assignor.)					
203, 010	Dominy, Ezra, assignor to self and Milton Davis, Freedom, Ill. Stalk-cutter	Apr. 30, 1878	1257	364	13	786
200, 379	Domon, Ovide, Bienne, Switzerland. Watch-case	Feb. 19, 1878	511	151	13	328
200, 390	Same. Stem winding and setting device for watches	Feb. 19, 1878	512	151	13	328
204, 010	Donahoe, Patrick H., Middletown, Conn. Valve for hydrants, street-washers, &c.	May 21, 1878	842	241	13	946
205, 531	Donahue, Thomas, Binghamton, N. Y. Paper dish	July 2, 1878	71	21	14	18
202, 006	Donaldson, Robert B., Washington, D. C. Manufacture of dentists' tools for cleaning nerve-cavities	Apr. 2, 1878	142	41	13	619
	Donaldson, Samuel B., Scottborough, Ala. Churn	July 2, 1878	161	48	14	30
205, 620	Donaldson, William E. (See Snapp, James W., assignor.)					
207, 594	Donason, Alexander, Maquon, Ill. Road-grader	Sept. 3, 1878	10	4	14	350
	Donnell, John F. (See Allen, Boyd, assignor.)					
207, 401	Donnell, John Wesley, assignor to self and Garrett W. Schreurs, Muscatine, Iowa. Millstone-driver	Aug. 27, 1878	794	236	14	319
203, 125	Donnelly, Charles J., assignor of one-half interest to Peter B. and Abraham E. Sprengle, York, Pa. Match-machine	Apr. 30, 1878	1366	398	13	801
203, 714	Donner, Oscar W., Brooklyn, N. Y. Apparatus for washing filter-bags	May 14, 1878	514	146	13	897
209, 029	Donner, John O., New York, N. Y. Apparatus for the manufacture of hard sugar	Oct. 15, 1878	633	183	14	584
210, 678	Donovan, John T., Waco, Tex. Cotton-condenser	Dec. 10, 1878	324	88	14	874
204, 301	Dooley, John W., Middletown, Conn. Seed-distributor	May 28, 1878	1166	332	13	991
199, 625	Dooley, Thomas Brown, assignor, by mesne assignments, to Edward K. Butler, Boston, Mass. Machine for varnishing	Jan. 29, 1878	670	282	13	183
205, 367	Dooley, Thomas Brown, assignor to self, Daniel Gunn, and George N. Bliss, Boston, Mass. Varnishing-machine	June 25, 1878	1019	302	13	1158
	Doolittle, H. H. (See Potter, Henry H., assignor.)					
199, 524	Doolittle, Thomas B., Bridgeport, Conn., assignor to Washburn & Moen Manufacturing Company, Worcester, Mass. Wire-barbing machine	Jan. 22, 1878	838	245	13	155
208, 969	Doolittle, Thomas B., Bridgeport, Conn., assignor, by mesne assignments, to Eugene F. Phillips, Providence, R. I. Tip for switch-cords	Oct. 15, 1878	568	165	14	576
209, 115	Doolittle, Thomas B., Bridgeport, Conn. Switch for district telephone systems	Oct. 22, 1878	747	217	14	605
205, 064	Doolittle, William B., Brooklyn, N. Y. Awning	June 18, 1878	685	201	13	1110
	Dooly, Joshua, et al. (See McKinny, Stephen F., assignor.)					
	Dorand, Joseph H. (See Irens & Dorand.)					
202, 525	Doremus, Willard D., Washington, D. C., assignor of three-fourths interest to John W. Mancourt, Brooklyn, N. Y. Bottle-stopper	Apr. 16, 1878	706	206	13	706
207, 954	Doremus, Willard D., Washington, D. C., assignor of one-half interest to John W. Mancourt, Brooklyn, N. Y. Air-compressor	Sept. 10, 1878	396	120	14	402
208, 066	Doremus, Willard D., Washington, D. C., assignor of three-fourths interest to J. W. Mancourt, Brooklyn, N. Y. Machine for compressing and stamping lead seals	Sept. 10, 1878	455	137	14	410
190, 194	Doremus, William T., New York, N. Y. Sash-fastener	Jan. 15, 1878	499	147	13	94
201, 655	Same. same	Mar. 26, 1878	885	270	13	561
	Dorgan, Michael H. (See Hennessy & Dorgan.)					
8, 223	Dorlan, Samuel B. (See White, J. Atwood, assignor.)					
200, 441	Dorman, John F. W., Baltimore, Md. Hand-stamp	May 7, 1878	316	90	13	864
206, 935	Dornitzer, Anna, New York, N. Y. Window-cleaning chair	Feb. 19, 1878	570	168	13	357
206, 936	Same. Window-cleaning step-chair	Aug. 13, 1878	300	92	14	247
209, 961	Same. same	Aug. 13, 1878	301	92	14	247
205, 844	Dorner, Fred G., Milwaukee, Wis. Millstone-driver	Nov. 19, 1878	474	143	14	732
208, 227	Dorpmüller, Heinrich, Munich-Gladbach, Germany. Speed-recorder	July 9, 1878	425	121	14	66
203, 011	Dorr, Samuel G., Buffalo, N. Y. Vaginal speculum	Sept. 24, 1878	710	209	14	452
	Dorr, Warren, Gardiner, Me. Car-coupling	Apr. 30, 1878	1258	365	13	786
	Dorrance, James G., et al. (See Slater, Benjamin, assignor.)					
	Dorris, O. E. (See Swan, Thomas Byrn, assignor.)					
	Dorsey, James. (See Dougherty, John B., assignor.)					
210, 764	Dorsey, Osbourn, Washington, D. C. Door-holding device	Dec. 10, 1878	414	115	14	886
	Dorsey, Robert S., et al. (See Greene, John N., assignor.)					
	Dorsey, Robert S. (See Tucker, William H., assignor.)					
206, 303	Doten, Charles C., Plymouth, Mass. Addressing-machine	July 23, 1878	956	271	14	142
	Doty, Albert J. (See Condict & Doty.)					
	Doty, Alexander H. (See Johnson, Frank G., assignor.)					
210, 018	Doty, Charles E., and George W. Flint, Rock Falls, Ill. Extension step-ladder	Nov. 19, 1878	537	161	14	700
	Doty, Nathan. (See Rockwell & Doty.)					
201, 508	Doty, Peter B., Conneaut, Ohio. Seed-planter	Mar. 10, 1878	718	218	13	534
202, 248	Doty, William B., Chillicothe, Ohio. Steam water-elevator	Apr. 9, 1878	415	121	13	601
	Double Pointed Tuck Company. (See Walton, Jonathan, assignor.)					
202, 007	Doublar, John W. H., Rockford, Ill. Weather-strip	Apr. 2, 1878	143	42	13	620

*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
	Doucet, F. Augustus. (See Palmer, Charles H., jr.)					
199, 195	Dougherty, Caroline J., et al. (See Caum, Edward L., assignor).....(Reissue.)	Jan. 15, 1878	500	147	13	94
210, 019	Dougherty, Edward D., Philadelphia, Pa. Holder for neck-wear.....	Nov. 19, 1878	538	102	14	760
	Dougherty, Henry M., Newark, N. J. Carbureter.....					
	Dougherty, James. (See King & Dougherty.)					
	Dougherty, James Henry. (See Briggs & Dougherty.)					
	Dougherty, John B. (See Pitkin & Dougherty.)					
203, 429	Dougherty, John B., Rochester, assignor to Burrell, Ives & Co., and D. H. Burrell, Little Falls, N. Y. Machine for cutting hoops from the log.....	May 7, 1878	203	58, 59	13	848
207, 721	Dougherty, John B., Rochester, N. Y. Hoop.....	Sept. 3, 1878	140	42	14	367
209, 962	Dougherty, John B., assignor of one-half interest to James Dorsey, Rochester, N. Y. Hoop-cutting machine.....	Nov. 19, 1878	475	143	14	752
202, 334	Doughty, Walter S., Cape Elizabeth, Me. Sprinkler.....	Apr. 16, 1878	521	153	13	681
208, 893	Dougine, James T., San Francisco, Cal. Excavating-machine.....	Oct. 15, 1878	482	139	14	565
	Douglas, B., et al. (See Douglas, Joseph W., assignor).....(Reissue.)					
205, 738	Douglas, Bailey B., Newark, N. J. Hose-reel.....	July 9, 1878	311	91	14	52
8, 177	Douglas, Joseph W., Middletown, Conn., assignor to W. & B. Douglas. Knapsack fire-engine.....(Reissue.)	Apr. 16, 1878	834	240	13	720
8, 328	Douglas, Robert, Glasgow, Scotland, assignor, by mesne assignments, to James Wood, Fall River, and Caleb L. Smith, Lowell, Mass. Machine for making cap-tubes. (Reissue).....	July 9, 1878	540	154	14	81
	Douglas, W., et al. (See Douglas, Joseph W., assignor).....(Reissue.)					
202, 526	Douglas, William O., Binghamton, N. Y. Truss-bridge.....	Apr. 16, 1878	707	206	13	706
	Doulceron, Alfred, jr. (See Doulceron, Joseph, sr., and Alfred, jr.)					
210, 105	Doulceron, Joseph, sr., and Alfred, jr., Brussels, Belgium. Bottle-stopper.....	Nov. 19, 1878	630	187	14	772
	Douson, Daniel. (See Burroughs, Joseph, assignor.)					
210, 679	Douty, William H., Shamokin, Pa. Holder for wrapping-paper.....	Dec. 10, 1878	325	89	14	875
209, 553	Dow, Charles H., Providence, R. I. Check-rein attachment.....	Nov. 5, 1878	16	5	14	683
206, 546	Dow, Eli S., assignor to Graham B. Dennis, Dayton, Ohio. Electric stamp-canceler.....	July 30, 1878	1239	356	14	181
206, 708	Dow, George Edwin, San Francisco, Cal. Steam-engine.....	Aug. 6, 1878	52	16	14	213
209, 469	Dowlin, Marshall R., North Adams, Mass. Buckle-tongue cover for harness.....	Oct. 29, 1878	1114	325	14	659
206, 937	Dowling, John, assignor of one-half interest to James Lee, jr., Plymouth, Pa. Steam-cock.....	Aug. 13, 1878	302	92	14	247
205, 739	Dowling, John W., Rochester, N. Y. Combined wood and sheet-metal box.....	July 9, 1878	312	91	14	52
	Dowling, Patrick. (See Merrill & Dowling.)					
8, 243	Dowling, Thomas, assignor to self and Israel C. Mayo, Gloucester, Mass. Pump. (Reissue).....	May 21, 1878	965	276	13	961
208, 722	Dowling, Thomas, Gloucester, Mass. Discharge-pipe for pump-spouts, faucets, &c.....	Oct. 8, 1878	283	81	14	534
207, 492	Downey, Bernard J., Washington, D. C. Stench-trap.....	Aug. 27, 1878	894	263	14	330
208, 379	Same..... Vacuum-valve for stench-traps.....	Sept. 24, 1878	871	253	14	472
201, 758	Downey, William F., Washington, D. C. Sewer and other trap.....	Mar. 26, 1878	984	301	13	576
207, 260	Same..... Sewer-trap.....	Aug. 20, 1878	640	191	14	293
200, 520	Downie, George Henry, Winona, Minn. Coffee-roaster.....	Feb. 19, 1878	644	190	13	348
204, 140	Downing, Burton J., assignor of one-half interest to F. J. Seybold, Saint Louis, Mo. Combined whip-socket and rein-holder.....	May 28, 1878	997	283	13	969
208, 380	Downing, Jerome F., Erie, Pa. Child's carriage.....	Sept. 24, 1878	872	254	14	472
202, 159	Downing, Thomas K., Okolona, Miss. Ax.....	Apr. 9, 1878	328	96	13	649
202, 008	Downing, William H., and Oliver W. Chamberlain, Fairview Township, Butler County, Pa. Device for cleaning rope for paper-making.....	Apr. 2, 1878	144	42	13	620
207, 955	Downs, Burage B., Eau Claire, Wis. Sluice and flood gate.....	Sept. 10, 1878	397	120	14	402
207, 402	Downs, Herman G., assignor of one-half interest to C. W. Rhodes, New York, N. Y. Pencil-sharpener.....	Aug. 27, 1878	795	236	14	319
204, 302	Downton, Robert L. (See Shanton, James T., assignor.)					
202, 420	Downton, Robert Lucas, Milwaukee, Wis. Manufacturing flour.....	May 28, 1878	1167	333	13	991
200, 266	Doyle, James, Lowell, Mass. Thread-guard support for ring-spinning frame.....	Apr. 16, 1878	607	178	13	692
204, 956	Doyle, John, Hoboken, N. J. Motor for propelling vehicles, or mechanical horses.....	Feb. 12, 1878	384	114	13	300
206, 866	Doyle, Michael, San Francisco, Cal. Wardrobe.....	June 18, 1878	581	170	13	1096
201, 569	Doyle, Michael, Brooklyn, N. Y. Apparatus for cleaning and polishing coffee, &c.....	Aug. 13, 1878	229	73	14	239
204, 303	Drake, Edwin S., Brooklyn, N. Y. Lamp-chimney.....	Mar. 19, 1878	719	219	13	534
204, 304	Same..... Lamp.....	May 28, 1878	1168	333	13	991
204, 305	Same..... same.....	May 28, 1878	1169	333	13	991
204, 306	Same..... same.....	May 28, 1878	1169	333	13	991
203, 132	Same..... same.....	May 28, 1878	1170	334	13	991
	Drake, John C., assignor of one-half interest to Charles O. Kimball, Little Rock, Ark. Fence.....	Feb. 12, 1878	249	76	13	280
208, 468	Drake, John C., assignor to self and S. Z. Hall's Southern Cotton Gin Company, Little Rock, Ark. Cotton-gin-saw cleaner.....	Oct. 1, 1878	16	4	14	491
199, 626	Drake, Samuel E., assignor of one-half interest to George H. Platt, Canton, Ill. Sulky-plow.....	Jan. 29, 1878	972	283	13	183
	Drake, Simeon N. (See Riethmüller, John C., assignor.)					
	Drane, E. M. (See Patterson, William N., assignor.)					
	Draper, H. V. P., et al. (See Bash, Henry R., assignor.)					
	Draper & Sons, George. (See Allen, Nicholas I., assignor.)					
210, 303	Draper, Virgil, North Attleborough, Mass. Gem-setting.....	Nov. 26, 1878	853	251	14	806
206, 867	Drayer, William E. (See Shellenback, Peter, assignor.)					
206, 232	Drayton, Benjamin A., New York, N. Y. Food-holder for bird-cages.....	Aug. 13, 1878	230	73	14	249
206, 868	Dreher, Baptist, Cleveland, Ohio. Stringing pianos.....	July 23, 1878	874	249	14	132
	Dreher, Hiram J., assignor of three-fourths interest to Phenix Plumbago Mining Company, Philadelphia, Pa. Stove-polish.....	Aug. 13, 1878	231	.....	14	239
	Dremman, C. M. (See Walker, John, assignor.)					
8, 447	Dressell, Andrew, Ernst H. and John G. Voth, Cleveland, Ohio, assignors, by mesne assignments, to Dorthea Dressell and Charles W. Voth. Head-light for locomotives. (Reissue).....	Oct. 8, 1878	465	134	14	558
203, 711	Dressell, Andrew, Ernst Heinrich and John G. Voth, Cleveland, Ohio, assignors to Dorthea Dressell. Head-light for locomotives.....	Apr. 23, 1878	937	268	13	741
210, 412	Dressell, Andrew, Ernst H., and John G. Voth, assignors to Dorthea Dressell and Charles W. Voth, Cleveland, Ohio. Signal head-light.....	Dec. 3, 1878	25	5	14	827
	Dressell, Dorthea. (See Dressell & Voth, assignors.)					
	Dressell, Dorthea, et al. (See Dressell & Voth, assignors.)					
	Same..... same..... (Reissue.)					
	Drew, Charles H. (See Washburn, Martin P., assignor.)					
201, 599	Drew, George R., Millburn, N. J. Combined rule, square, and comb.....	Mar. 26, 1878	832	253	13	553
207, 493	Drew, Walter J., assignor of one-half interest to William M. Robinson, Grand Rapids, Mich. Vehicle-axle lubricator.....	Aug. 27, 1878	895	263	14	330
200, 901	Dreyfus, Isidore, New York, N. Y. Machine for compressing and purifying air.....	Mar. 5, 1878	84	29	13	423



*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and occupation.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr's.	Vol.	Page.
202, 712	Driscoll, James H., and Luke Balcom, Oconto, Wis. Log-turner .....	Apr. 23, 1878	938	268	13	741
207, 403	Driver, John F., James T. Luna, William H. Sanders, and Addison P. Hill, Lewisburg, Tenn. Motor .....	Aug. 27, 1878	796	237	14	319
199, 274	Dronillard, James P., assignor of one-half interest to Alexander Gleason, Greenville, Mich. Flume for water-wheels .....	Jan. 15, 1878	577	168	13	105
200, 133	Drummond, James T., Alton, Ill. Marking plug-tobacco .....	Feb. 12, 1878	251	76	13	280
	Drummond, William W. (See Aiken & Drummond.) .....					
	Drummond, William W., et al. (See Smith, George E., assignor.) .....					
207, 595	Dryden, George, assignor of one-half interest to Edmund Converse, Worcester, Mass. Piston-packing .....	Sept. 3, 1878	11	4	14	350
	Dryfoos, Joseph, et al. (See Beck, August, assignor) .....					
	Dryfoos, Louis, et al. (See Beck, August, assignor) .....					
200, 992	Du Bois, John, Williamsport, Pa. Machine for ripping, surfacing, and matching lumber. Dubroy, Anthone. (See Everett & Dubroy.) .....	Mar. 5, 1878	167	54, 55	13	441
209, 802	Du Brul, Cyriac, Cincinnati, Ohio. Tobacco-granulating machine .....	Nov. 12, 1878	296	88	14	724
	Du Brul, Napoleon. (See Duburn, Anthony M., assignor.) .....					
202, 335	Du Brul, Napoleon, assignor to Napoleon Du Brul & Co., Cincinnati, Ohio. Transportation oil-cans .....	Apr. 16, 1878	521	153	13	681
203, 715	Du Brul, Napoleon, Cincinnati, Ohio. Cigar-mold .....	May 14, 1878	516	146	13	897
205, 065	Same..... Cigar-packer press .....	June 18, 1878	687	201	13	1110
209, 801	Same..... Tobacco-granulating machine .....	Nov. 12, 1878	295	88	14	724
210, 191	Same..... same .....	Nov. 26, 1878	737	219	14	791
203, 716	Duburn, Anthony M., assignor to Napoleon Du Brul, Cincinnati, Ohio. Lantern .....	May 14, 1878	517	146	13	897
207, 046	Duchamp, Eugene, Saint Martinville, La. Faucet .....	Sept. 3, 1878	66	19	14	357
205, 532	Duchemin, William, Boston, Mass. Bobbin-winder .....	July 2, 1878	72	21	14	18
207, 022	Same..... Automatic fan .....	Aug. 13, 1878	383	118	14	257
204, 546	Duckworth, John C., assignor to E. S. Higgins & Co., New York, N. Y. Carpet .....	June 4, 1878	114	39	13	1029
202, 004	Dudley, Charles, assignor to O. B. North & Co., New Haven, Conn. Adjustable carriage-top .....	Apr. 2, 1878	141	41	13	619
202, 527	Same..... Carriage-top adjuster .....	Apr. 16, 1878	708	207	13	707
205, 845	Dudley, James L., Snowville, assignor of one-half interest to J. D. Noble, Dublin, Va. Vehicle-wheel .....	July 9, 1878	426	121	14	66
209, 963	Duesh, Henry, Baltimore, Md. Soft-dough machine .....	Nov. 19, 1878	477	144	14	752
	Dufer, Ezra T., et al. (See Austin, Dinsmore, assignor.) .....					
204, 307	Duff, James, Peoria, Ill. Casting apparatus .....	May 28, 1878	1171	334	13	991
200, 442	Duffee, Manly J., assignor to self and John W. Miller, Mobile, Ala. Envelope .....	Feb. 19, 1878	571	169	13	937
210, 765	Duffie, John S., assignor of one-half interest to Edward H. Chamberlain, Little Rock, Ark., and Marcus A. Wallace, Jackson, Mo. Office-indicator .....	Dec. 10, 1878	115	415	14	886
	Duffield, James. (See Cammell & Duffield.) .....					
	Duffus, William. (See Maybee, Addie, assignor.) .....					
	Duffy, Patrick Francis. (See Allen & Duffy.) .....					
210, 766	Duffy, Terrence, Pittsburg, Pa. Check and safety valve .....	Dec. 10, 1878	416	115	14	886
	Dufflho, Leon. (See Normand & Dufflho.) .....					
	Dufflot, Cesaire P. (See Viol & Dufflot.) .....					
204, 547	Dufour, Joseph, Racine, Wis. Thill-coupling .....	June 4, 1878	115	39	13	1029
	Dufur, D. O., et al. (See Austin, Dinsmore, assignor.) .....					
204, 804	Dugan, Philip A., Brooklyn, N. Y. Chimney-cowl .....	June 11, 1878	400	117	13	1069
209, 239	Dugan, William P., jr., Watauga, Tenn. Clothes-pounder .....	Oct. 22, 1878	871	253	14	622
	Duggins, George G., et al. (See Eubank, Reuben B., jr., assignor.) .....					
	Dugin, Elizabeth E. (See Griffin, Caleb H., assignor) .....					
	Dulaney, Theophilus. (See Dulaney, William H. and Theophilus.) .....					
199, 697	Dulaney, William H. and Theophilus, Peterstown, W. Va. Butter-shaper .....	Jan. 29, 1878	1042	304	13	194
	Dulaney, William J. C. (See Eastman, Henry W., assignor.) .....					
	Dumont, H. D. (See Eastman, William W., assignor.) .....					
210, 304	Du Motay, Cyprien Tessil, and Edward Stern, Paris, France. Manufacture of fuel from carbonaceous powder .....	Nov. 26, 1878	854	.....	14	806
211, 003	Dunbar, Eugene M., Kalamazoo, Mich. Harrow .....	Dec. 17, 1878	700	193	14	930
200, 703	Dunbar, George S., Pittsfield, Mass. Gas-lighter and automatic extinguisher .....	Feb. 26, 1878	855	252	13	387
	Dunbar, Henry D. (See Brothers, Oliver, jr., assignor.) .....					
8, 043	Dunbar, Hiram P., and Thomas C. Lothrop, Boston, Mass. Rubber article. (Reissue.) .....	Jan. 22, 1878	927	271	13	169
199, 359	Dunbar, John, assignor to W. D. Stevens, Springfield, Mass. Making seams in woven-wire work for paper-machines .....	Jan. 22, 1878	674	197	13	129
205, 368	Dunbar, Junius H., Glenwood, Mo. Cut-off for engines .....	June 25, 1878	1020	302	13	1158
200, 648	Dunbar, Peter, Cincinnati, Ohio. Ironing-table .....	Feb. 26, 1878	796	234	13	379
204, 658	Dunbar, Peter, assignor of one-half interest to William Constable, Cincinnati, Ohio. Clothes-drier .....	June 11, 1878	242	76	13	1050
205, 533	Duncan, Robert L., Decatur, Ga. Millstone-dress .....	July 2, 1878	73	21	14	18
8, 237	Dunderdale, Cleaveland F., Kingston, N. Y. Composition for making hydraulic cement .....					
	Dungan, William H., Johnson County, Ind. Bag-holder .....	May 21, 1878	958	.....	13	960
200, 857	Dungan, William H., jr., Watauga, Tenn. Clothes-pounder .....	Mar. 5, 1878	43	15	13	421
203, 430	Dungan, William P., jr., Watauga, Tenn. Clothes-pounder .....	May 7, 1878	206	59	13	848
207, 956	Dunham, Henry, Abington, Mass. Boot and shoe nailing machine .....	Sept. 10, 1878	398	120, 121, 157, 158	14	402
205, 950	Dunham, Humphrey B., Newark, N. J. Apparatus for charging water with carbonic-acid gas .....	July 16, 1878	552	.....	14	88
199, 899	Dunham, Truman and William M., Cleveland, Ohio. Tub-ear .....	Feb. 5, 1878	9	3	13	234
	Dunham, William M. (See Dunham, Truman and William M.) .....					
208, 800	Dunklee, Galusha C., Boston, Mass. Stove-pipe damper .....	Oct. 8, 1878	373	106	14	546
207, 494	Dunlap, Emmet R., South Lyon, and George W. Dunlap, Grand Rapids, Mich. Carpenters' gage-tool .....	Aug. 27, 1878	896	264	14	330
	Dunlap, George W. (See Dunlap, Emmet R. and George W.) .....					
209, 334	Dunlap, Leammis S., Galena Township, La Porte County, Ind. Windmill .....	Oct. 29, 1878	976	284	14	639
199, 042	Dunn, Charles W., sr., Quincy, Ill. Bellows .....	Jan. 8, 1878	329	96	13	67
207, 166	Dunn, Frank, Gloucester, Mass. Life-boat .....	Aug. 20, 1878	538	162	14	281
203, 899	Dunn, Gertrude A., Chicago, Ill. Paper box .....	May 21, 1878	719	206	13	931
	Dunn, Jefferson, et al. (See Gray, Richard, assignor.) .....					
201, 656	Dunn, John, Portland, Conn. Thread-holder .....	Mar. 26, 1878	886	270	13	561
202, 250	Dunn, John, and Thomas H. Birdsall, New York, N. Y. Sewer-trap .....	Apr. 9, 1878	417	121	13	661
202, 421	Dunn, John, Oskaloosa, Iowa. Washing-machine .....	Apr. 16, 1878	607	178	13	693
202, 249	Dunn, Robert, Wylam, England. Nut-lock .....	Apr. 9, 1878	416	121	13	661
	Dunn, William. (See Hearst & Dunn.) .....					
8, 467	Dunn, William, assignor to Isaac B. McQuesten, Hamilton, Ontario, Canada. Car-coupling .....					
198, 972	Dunn, William, St. Mary's, assignor to Isaac B. McQuesten, Hamilton, Ontario, Canada. Car-coupling .....	Oct. 29, 1878	1194	347	14	670
		Jan. 8, 1878	264	76	13	56

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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203, 012	Dunn, William, assignor to John Harvey, Hamilton, Ontario. Seal-lock .....	Apr. 30, 1878	1250	365	13	786
200, 443	Dunne, Lawrence, and Ephraim Thomas Carroll Richmond, Morgantown, W. Va. Rain-gage .....	Feb. 19, 1878	572	169	13	337
206, 304	Dunne, Lawrence, Morgantown, W. Va. Electric recorder .....	July 23, 1878	959	{ 271 } 272	14	142
209, 670	Same .....	Nov. 5, 1878	147	43	14	700
207, 722	Dunning, Russell O., Jefferson, assignor to Oliver F. Field, Woodstock, Ill. Hat-holder .....	Sept. 3, 1878	141	43	14	367
207, 855	Dunseith, James, and Samuel Crawford, New York, N. Y. Water-heater for stove-pipes .....	Sept. 10, 1878	291	89	14	389
209, 240	Du Plaine, Edmund A. C., Philadelphia, Pa. Alloy to be used with other alloys .....	Oct. 22, 1878	871	.....	14	622
	Dupont, Eugene. (See Conn & Dupont.)					
	Du Puget, Albert L. (See Grivel, Emile, assignor.)					
	Durand & Co. (See Durand, Wallace, assignor.)					
204, 957	Durand, Emile, La Bastide, Rouaioux, France. Brick and tile machine .....	June 18, 1878	581	170	13	1696
210, 927	Durand, Eugene, Paris, France. Tobacco-cutting machine .....	Dec. 17, 1878	612	{ 169 } 170	14	920
208, 381	Durand, John H., Detroit, Mich. Wagon-gear .....	Sept. 24, 1878	873	254	14	472
200, 183	Durand, Louis, assignor to self and H. C. Bosse, Quebec, P. Q., Canada. Dough-kneading machine .....	Feb. 12, 1878	302	90	13	288
204, 548	Durand, Wallace, assignor to Durand & Co., Newark, N. J. Bracelet .....	June 4, 1878	116	39	13	1629
207, 111	Durant, Edward G., Racine, Wis. Blackboard .....	Aug. 20, 1878	487	146	14	274
200, 267	Durant, Walter N., Milwaukee, Wis. Tallying-machine .....	Feb. 12, 1878	386	114	13	301
	Durfee, Edward. (See Huber, Titus, Durfee & Swinnerton.)					
	Durgh, Elizabeth E. (See Griffin, Caleb H., assignor.)					
	Durgh, Henry J. (See Hall & Durgh.)					
190, 043	Durham, Caleb Wheeler, Chicago, Ill. Hot-air furnace .....	Jan. 8, 1878	330	97	13	67
202, 160	Durkin, Michael T., New York, N. Y. Skylight .....	Apr. 9, 1878	329	96	13	649
	Durner, M., et al. (See Seachrist, William, assignor.)					
	Durrell, George A., et al. (See Maddocks, Nelson P., assignor.)					
210, 507	Durrough, James L., Hamilton, Ohio. Brick-mold .....	Dec. 3, 1878	122	32	14	839
207, 856	Duryes, Wright, Brooklyn, N. Y. Fire-escape .....	Sept. 10, 1878	292	89	14	389
210, 928	Same .....	Dec. 17, 1878	613	170	14	920
201, 759	Dusch, John, and Henry Lewis, Day City, Ill. Harvester .....	Mar. 26, 1878	985	301	13	576
204, 413	Dusenbury, C. Coles, and Willis H. Winn, assignors to Winn Manufacturing Company, New York, N. Y. Gas and air carbureter .....	May 28, 1878	1281	365	13	1005
	Dushane, John A. (See Jones, George F., assignor.)					
209, 671	Du Souchet, Osman Cherish, Alexandria, Mo. Check-row corn planter and drill .....	Nov. 5, 1878	149	43, 44	14	701
	Dutcher Temple Company. (See Allen, Nicholas I., assignor.)					
	Same .....					
190, 275	Dutot, James, and William Hamilton Thrift, Newton, Iowa. Reversible center-piece for stoves and ranges .....	Jan. 15, 1878	578	169	13	106
200, 704	Dutrow, David E., Washington, D. C. Egg-carrier .....	Feb. 26, 1878	857	252	13	388
203, 431	Same .....	May 7, 1878	207	59	13	848
206, 094	Same .....	July 16, 1878	696	201	14	106
210, 305	Dutton, Chamcey N., Washington, D. C. Lock-hinge .....	Nov. 26, 1878	855	251	14	806
202, 797	Dutton, Leander K., Oskaloosa, Iowa. Burial-case .....	Apr. 23, 1878	1024	294	13	753
190, 147	Dutton, Noah, Janesville, Wis. Covering for spring bed-bottoms .....	Jan. 15, 1878	455	134	13	86
	Dutton, Rufus. (See Tonquist, Alfred, assignor.)					
207, 349	Dutton, Thomas E., Port Jefferson, Ohio. Vise .....	Aug. 27, 1878	745	222	14	312
	Duvall, Alfred, et al. (See Duvall, William T., assignor.)					
	Duvall, William B., et al. (See Baker, William C., assignor.)					
202, 336	Duvall, William T., assignor of two-thirds interest to Richard L. and Arthur B. Croyley, Georgetown, D. C. Brick-machine .....	Apr. 16, 1878	522	{ 153 } 154	13	681
202, 337	Duvall, William T., assignor of three-fourths interest to Richard L. Croyley, Arthur B. Croyley, and Alfred Duvall, Georgetown, D. C. Clay sawing and pulverizing machine .....	Apr. 16, 1878	525	154	13	681
204, 958	Dawelius, Charles H., and Henry Crivel, Richmond, Ind. Pump .....	June 18, 1878	583	171	13	1096
	Duygan, John A. (See Gordon & Duygan.)					
8, 101	Dwight, Caroline M., et al. (See Gannon, Lawrence E., assignor.)					
	Dwyer, Jeremiah, and George H. Barbour, assignors to Michigan Stove Company, Detroit, Mich. Culinary attachment to base-burning heating-stoves .....	Feb. 26, 1878	965	284	13	404
190, 424	Dye, Alexander M., Elkhart City, Ill. Truss and supporter .....	Jan. 22, 1878	735	216	13	139
203, 327	Dyer, Fayette, Rock Falls, Ill. Step-ladder .....	May 7, 1878	97	28	13	833
207, 112	Dyer, Fayette, Sterling, Ill. Wheelbarrow .....	Aug. 20, 1878	488	146	14	274
201, 170	Dyer, Fayette, and George Adair, Rock Falls, Ill. Fence-post .....	Mar. 12, 1878	352	108	13	475
201, 171	Dyer, Henry B., Toronto, Ontario, Canada. Joint for sidewalks .....	Mar. 12, 1878	353	109	13	475
203, 820	Dyer, Isaac T., Quincy, Ill. Window-sash .....	May 21, 1878	639	180	13	920
	Dyer, Thomas E. (See Hughes & Dyer.)					
204, 718	Dyer, Whitman S., Portland, Me. Jacketed can .....	June 11, 1878	306	94	13	1059
209, 803	Dyson, Dunbar S., Bloomington, Ill. Combination tool .....	Nov. 12, 1878	297	89	14	724
210, 508	Eade, Charles, assignor to self and H. J. Tarble, Honesdale, Pa. Spring-bed bottom .....	Dec. 3, 1878	123	33	14	840
208, 894	Eade, James B., Saint Louis, Mo. Dredging-machine .....	Oct. 15, 1878	484	{ 139 } 140	14	565
	Eagle Metallic Brush Company. (See Walker & Horton, assignors.)					
	Eagon, John A., et al. (See Kendall, Stephen, assignor.)					
200, 031	Eames, Frederick W., Watertown, N. Y. Car-brake coupling .....	Feb. 5, 1878	135	44	13	254
208, 895	Same .....	Oct. 15, 1878	486	140	14	565
204, 206	Eames, Henry H., San Francisco, Cal. Apparatus for refining sulphur .....	May 28, 1878	1073	306	13	979
208, 896	Earhart, George W., Columbus, Ohio. Grain-separator .....	Oct. 15, 1878	488	{ 140 } 141	14	565
	Earls, W. H. (See Ferrell, A. Franklin, assignor.)					
	Early, James. (See Young, William E., assignor.)					
204, 659	Earnest, George H., Springfield, Ohio. Sash-holder .....	June 11, 1878	242	76	13	1050
202, 637	Earnshaw, Ono, assignor of one-half interest to Edward Johnson, jr., Chicago, Ill. Fire lining and back for furnaces .....	Apr. 23, 1878	860	.....	13	733
201, 393	Eason, Richard B., New York, N. Y. Car-axle box .....	Mar. 19, 1878	603	185	13	517
208, 723	Eason, Robert, Springville, Ohio. Cider-mill .....	Oct. 8, 1878	284	81, 82	14	535
207, 404	Easterday, William Thomas, Watsonville, Cal. Seed-planter .....	Aug. 27, 1878	797	237	14	319
207, 858	Easterling, Caleb, Marion County, Ind. Shifting carriage-tops .....	Mar. 5, 1878	43	16	13	422
	Easterly, James. (See Burdick & Easterly.)					
207, 957	Eastham, Albert Standfield, Navasota, Tex. Gin-saw-filing machine .....	Sept. 10, 1878	401	{ 121 } 122	14	403
	Eastlake, Abram P. (See Bowles & Eastlake.)					
203, 605	Eastman, Andrew M., Somerville, Mass. Camp bed and chair .....	May 14, 1878	401	114	13	883
207, 800	Eastman, Franklin C., Cambridgeport, Mass. Bed-bottom .....	Sept. 10, 1878	231	72, 73	14	381



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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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201, 394	Eastman, George, Newton, Mass. Mirror and other frames.	Mar. 19, 1878	604	185	13	517
203, 251	Same. Composition frame for hand-mirrors, brushes, &c.	May 7, 1878	15	6	13	823
199, 148	Eastman, George C., Lewiston, Me. Shaft-supporter for carriage-harness.	Jan. 15, 1878	455	134	13	86
204, 011	Eastman, Henry W., assignor to self and William J. C. Dulany, Baltimore, Md. Black-board.	May 21, 1878	843	241	13	946
201, 657	Eastman, Sarah N. (See Eastman, William Everard, assignor.)					
208, 801	Eastman, William Everard, assignor to Sarah N. Eastman, Worcester, Mass. Mitering-machine.	Mar. 26, 1878	887	270	13	561
207, 801	Eastman, William W., assignor of one-half interest to H. D. Dumont, Brooklyn, N. Y. Lamp-burner.	Oct. 8, 1878	374	106	14	546
204, 141	Easton, Stephen R., Charleston, Ill. Window-sash.	Sept. 10, 1878	232	73	14	381
	Eaton, Asahel K., Brooklyn, N. Y. Multipolar magnet.	May 28, 1878	999	284	13	969
	Eaton & Ayer. (See Mills, Guy Carleton, assignor.)					
8, 282	Eaton, Cole & Burnham Company. (See Lay, Oliver B., assignor.)					
204, 428	Eaton, Daniel E., deceased, Maria A. Eaton, administratrix and assignor to Graham B. Dennis, Dayton, Ohio. Stamp-canceler.	June 11, 1878	491	142	13	1080
200, 095	Eaton, Elijah H., Philadelphia, Pa. Try-square, bevel, and miter.	June 4, 1878	13	5	13	1014
	Eaton, Joseph B., and Charles Latham, Shamokin, Pa.; said Eaton assignor to said Latham. Machine for cutting and threading pipe.	July 16, 1878	697	201	14	106
208, 011	Eaton, Maria A. (See Eaton, Daniel E.)					
	Eaton, Morris B., Le Roy, assignor of one-half interest to Lewis H. Rogus, Avon, N. Y. Compound for treating coal preparatory to burning.	Sept. 17, 1878	472		14	417
206, 305	Eaton, Peregrine G., Springville, N. Y. Bee-hive.	July 23, 1878	961	272 } 273 }	14	143
200, 649	Eaton, Robert William, Watsonville, Cal. Spoke-tenoning machine.	Feb. 26, 1878	796	234	13	379
198, 764	Ebaugh, David C., Charleston, S. C. Disintegrating or mixing machine.	Jan. 1, 1878	41	11	13	14
208, 970	Ebbitt, William. (See Smith, William H., assignor.)					
203, 432	Eberhard, William, and Robert Turner, Akron, Ohio. Oatmeal-machine.	Oct. 15, 1878	570	166	14	576
207, 405	Eberhart, Jacob W., Mishawaka, Ind. Sulky-plow.	May 7, 1878	208	60	13	848
	Eberhart, Lloyd, Joliet, Ill. Wire-barbing instrument.	Aug. 27, 1878	798	237	14	319
201, 510	Eberle, Emil. (See Eberle, Louis, sr., E., and L., jr.)					
8, 522	Eberle, Louis, jr. (See Eberle, Louis, sr., E., and L., jr.)					
	Eberle, Louis, sr., E., and L., jr., Mabelvale, Ark. Plow.	Mar. 19, 1878	720	219	13	534
204, 660	Eberle, Rachel, New York, N. Y., assignor to Christina J. Haley. Stocking-supporter clasp.	Dec. 17, 1878	793	218	14	941
8, 309	Eberly, Elliot, Dayton, Ohio. Sash-balance.	June 11, 1878	243	76	13	1050
204, 012	Ebert, William C., Hannibal, Mo., assignor to James Harris and Daniel P. Smith. Lamp-extinguisher.	July 2, 1878	268	80	14	42
	Eby, Henry H., Mendota, Ill. Cob-elevator for corn-shellers.	May 21, 1878	844	241	13	946
200, 381	Echelberry, J., et al. (See Kerr, Christopher C., assignor.)					
119, 044	Echelberry, M., et al. (See Kerr, Christopher C., assignor.)					
203, 433	Eckels, George, West Point, Miss. Indexing-book.	Feb. 19, 1878	513	151	13	328
205, 369	Eckardt, Johannes C., Stuttgart, Wurtemberg, Germany. Show-stand for Christmas-trees, &c.	Jan. 8, 1878	331	97	13	67
199, 698	Eckel, George, Richmond, Ind. Eaves-trough former.	May 7, 1878	209	60	13	849
208, 012	Eckert, Owen, and John W. Levan, White Haven, Pa. Rail-joint.	June 25, 1878	1021	302	13	1158
	Eckert, William, Jersey City, N. J. Wheelbarrow.	Jan. 29, 1878	1042	304	13	194
	Eckes, Charles, West Sand Lake, N. Y. Neck-yoke coupling.	Sept. 17, 1878	473	142	14	417
203, 717	Eckes, Peter J. (See Hildenbrand & Eckes.)					
210, 768	Eckles, George, Dover Centre, Minn. Grain-separator.	May 14, 1878	517	147	13	897
199, 627	Eddy, David, Sidney, Ill., assignor to James Whitcomb. Feather-renovator.	Dec. 10, 1878	417	116	14	887
202, 798	Eddy, George W., Watford, N. Y. Car-wheel.	Jan. 29, 1878	973	283	13	184
200, 804	Eddy, George W., New Britain, Conn. Burglar-alarm.	Apr. 23, 1878	1025	294	13	753
201, 600	Eddy, Horace D., and Joseph M. Kasson, Glenville, Ohio. Sod-cutter.	Nov. 12, 1878	298	89	14	725
200, 902	Eddy, Pembroke S., and Oliver P. Coggeshall, Providence, R. I. Collar and sleeve button and stud.	Mar. 26, 1878	833	253	13	553
202, 422	Eddy, Romulus A., East Saginaw, Mich. Clothes-pounder.	Mar. 5, 1878	85	29	13	428
200, 033	Edgar, Daniel, Adrian, Mich. Gate.	Apr. 10, 1878	608	178	13	693
203, 328	Edgar, James, New York, and Alfred Bardell, Brooklyn, N. Y. Frying-pan.	Feb. 5, 1878	137	45	13	255
204, 207	Edgar, John, New York, N. Y. Sheet-metal pan.	May 7, 1878	98	28	13	853
201, 701	Edgar, John, New Bloomfield, Pa. School-desk.	May 28, 1878	1075	306	13	979
198, 875	Edgar, William D., and William S. Day, assignors of one-third interest to Simon H. Merrell, Ottawa, Kans. Motor.	Mar. 26, 1878	987	301 } 302 }	13	576
203, 388	Edgarton, William W., Boncville, N. Y. Art of curing hops, and furnace used therefor.	Jan. 1, 1878	155	44	13	33
205, 060	Edgcomb, George W. (See Gore & Edgcomb.)					
206, 547	Edge, James, Paterson, N. J. Animal-trap.	Oct. 29, 1878	1032	300	14	647
200, 932	Edge, Samuel. (See Calhoun, Madison, assignor.)					
200, 993	Edgcomb, Edward F., assignor of one-half interest to William Watters, Mechanics Falls, Me. Magazine fire-arm.	June 18, 1878	688	202	13	1110
200, 032	Edgcomb, Edward F., Mechanics Falls, Me. Channeling-tool.	July 30, 1878	1240	357	14	181
200, 521	Edison, Thomas A., Menlo Park, N. J. Synchronous movement for electric telegraphs.	Feb. 5, 1878	136	45	13	254
200, 993	Same. Phonograph or speaking-machine.	Feb. 19, 1878	646	191	13	348
200, 994	Edison, Thomas A., Menlo Park, N. J., assignor to Western Union Telegraph Company. Acoustic telegraph.	Mar. 5, 1878	171	55	13	441
201, 760	Edison, Thomas A., Menlo Park, N. J. Automatic telegraph perforator and transmitter.	Mar. 5, 1878	173	55	13	441
203, 013	Same. Speaking-machine.	Mar. 26, 1878	986	301	13	576
	Edison, Thomas A., Menlo Park, N. J., assignor to Western Union Telegraph Company, New York, N. Y. Speaking-telegraph.	Apr. 30, 1878	1260	365	13	787
203, 014	Same. Same.	Apr. 30, 1878	1262	365 } 366 }	13	787
203, 015	Same. Same.	Apr. 30, 1878	1263	366	13	787
203, 016	Same. Speaking-telegraph.	Apr. 30, 1878	1265	366	13	787
203, 017	Same. Telephone call-signal.	Apr. 30, 1878	1266	366	13	787
203, 018	Same. Telephone or speaking-telegraph.	Apr. 30, 1878	1267	367	13	787
203, 019	Same. Circuit for acoustic or telephonic telegraph.	Apr. 30, 1878	1268	367	13	788
203, 329	Edison, Thomas A., Menlo Park, N. J. Perforating-pen.	May 7, 1878	99	28	13	833
205, 370	Same. Pneumatic stencil-pen.	June 25, 1878	1022	302	13	1158
207, 723	Edison, Thomas A., Newark, N. J., assignor of one-half interest to George B. Prescott, New York, N. Y. Duplex telegraph.	Sept. 3, 1877	142	43	14	367
207, 724	Edison, Thomas A., Newark, N. J. Duplex telegraph.	Sept. 3, 1878	142	43	14	367
208, 299	Edison, Thomas A., Menlo Park, N. J., assignor to Western Union Telegraph Company, New York, N. Y. Speaking-telephone.	Sept. 24, 1878	791	231	14	461
209, 241	Edison, Thomas A., Newark, N. J., assignor of one-half interest to George B. Prescott. Quadruplex-telegraph repeater.	Oct. 22, 1878	872	253	14	622

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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210, 767	Edison, Thomas A., Menlo Park, N. J. Vocal engine.....	Dec. 10, 1878	416	115	14	886
203, 606	Edmands, George D., Milford, Mass. Spinning-ring holder.....	May 14, 1878	402	114	13	883
208, 382	Edmonds, George, New Orleans, La. Car-coupling.....	Sept. 24, 1878	874	254	14	472
206, 548	Edmonds, John W., assignor to self and Charles W. Benton, Jersey City, N. J. Packing for steam-engines.....	July 30, 1878	1241	357	14	182
206, 306	Edmondson, George D., Detroit, Mich. Frame for spectacles and eye-glasses.....	July 23, 1878	962	273	14	143
204, 142	Edmondson, James Henry, Valparaiso, Ind. Earth-scraper.....	May 28, 1878	999	284	13	909
202, 423	Edmondson, Nelson D., Crown Point, Ind. Sulky road-scraper.....	Apr. 16, 1878	609	178	13	693
209, 964	Edmondson, James H., Valparaiso, Ind. Earth-scraper.....	Nov. 19, 1878	479	144	14	752
205, 789	Edmunds, Charles E., East Corinth, Me. Shaft-lug protector.....	July 9, 1878	367	106	14	58
209, 903	Edson, Jacob, Boston, Mass. Vehicle-axle box.....	Mar. 5, 1878	86	29, 30	13	428
201, 336	Edson, Julius T. (See Deering, Mark L., assignor.) Ship's pump.....	Mar. 19, 1878	546	168	13	509
	Edwards, Alfred G. (See Andrews & Edwards.)					
	Edwards, A. N., et al. (See Randall, John C., assignor.)					
210, 769	Edwards, David, New York, N. Y. Sugar-mixing apparatus.....	Dec. 10, 1878	418	116	14	887
269, 470	Edwards, Edward B., Columbia, Pa. Manufacturing and piling iron.....	Oct. 29, 1878	1114	325	14	669
199, 525	Edwards, Henry H. and John R., Baltimore, Md. Temporary binder for letters.....	Jan. 22, 1878	841	245	13	155
	Edwards, John R. (See Edwards, Henry H. and John R.)					
199, 965	Edwards, John Wesley, Oswego, Ill. Pinchers for applying fence-barbs.....	Feb. 5, 1878	75	25	13	245
205, 621	Edwards, Newton, Decatur, Ill. Vegetable-slicer.....	July 2, 1878	162	48	14	30
201, 601	Edwards, Richard L. and John Lee, New York, N. Y., assignors to A. H. Lucas and L. F. Prince, Saint Louis, Mo. Egg-box.....	Mar. 26, 1878	833	253	13	553
198, 932	Edwards, William E., Oakland, and Frank J. Gracior, San Francisco, Cal. Bellows-nozzle.....	Jan. 8, 1878	223	63	13	50
	Edwards, William F. (See Irwin, Thompson H., assignor.)					
	Edwards, Y. M., et al. (See Randall, John C., assignor.)					
	Egelberner, Thomas F., et al. (See Fox, Addison C., assignor.)					
	Egerton, C. Calvert. (See Walker & Egerton.)					
207, 596	Egery, Marshal J., Bangor, Me. Machine for edging lumber.....	Sept. 3, 1878	12	5	14	351
202, 528	EGGE, Fredrick, assignor to Smith & Egge Manufacturing Company, Bridgeport, Conn. } Manufacture of sheet-metal chains.....	Apr. 16, 1878	709	207 208 209	13	707
207, 406	Same..... Animal-trap.....	Aug. 27, 1878	799	237	14	319
207, 407	Same..... Padlock.....	Aug. 27, 1878	801	238	14	319
	Eggers, Selmar. (See Pierce & Eggers.)					
208, 724	Eggers, Selmar, and Ebenezer Pierce, New Bedford, Mass. Projectile for throwing lines.....	Oct. 8, 1878	286	82	14	535
205, 622	Eggleston, Anson W., Chicago, Ill. Draw-bar for street-cars.....	July 2, 1878	163	49	14	30
207, 408	Eggleston, John C., Waterbury, Conn. Switch-chair.....	Aug. 27, 1878	804	238	14	330
201, 395	Eggleston, Walter H., Sugar Land, Tex. Hoe.....	Mar. 19, 1878	605	185	13	517
206, 307	Eglington, Ferdinand, Walsall, England. Shaft-tug.....	July 23, 1878	963	273	14	143
	Egyptian Embalmer Company. (See McGowan, Richard J., assignor.)					
199, 045	Ehrich, Adolph J. F., Kellogg, Minn. Draft-equalizer.....	Jan. 8, 1878	332	98	13	68
203, 900	Eich, Martin Joseph, Plymouth, Ind. Drive-well-point filter.....	May 21, 1878	729	206	13	931
198, 876	Eickemeyer, Rudolf, Yonkers, N. Y. Process and machine for stretching hats.....	Jan. 1, 1878	156	45	13	33
200, 034	Same..... Hat blocking and banding machine.....	Feb. 5, 1878	138	45, 46	13	255
201, 396	Same..... Mower.....	Mar. 19, 1878	605	186	13	517
202, 529	Same..... Hat-pouncing machine.....	Apr. 16, 1878	721	210	13	707
206, 168	Same..... Hat-stretching machine.....	July 23, 1878	802	230	14	122
210, 509	Same..... Hat-shaving machine.....	Dec. 3, 1878	125	33	14	840
210, 770	Same..... Pinning-out stretcher for hat-bodies.....	Dec. 10, 1878	419	116	14	887
210, 771	Same..... Elastic hat-block.....	Dec. 10, 1878	420	116	14	887
210, 929	Same..... Diaphragm for telephones and phonographs.....	Dec. 17, 1878	614	171	14	920
	Eisenbaun, Alwin. (See Lang & Eisenbaun.)					
202, 251	Eisenberg, George. (See Freshman, Andrew P., assignor.)					
	Eisenhardt, George F., assignor to self, Herman Dienelt, and George F. Gelbach, Philadelphia, Pa. Centrifugal machine.....	Apr. 9, 1878	417	122	13	662
	Eisenhart, William H., et al. (See Yinger, Franklin S., assignor.)					
	Eisenman, Luke. (See Grubs, John, assignor.)					
209, 389	Eitman, George, Round Grove, Ill. Scraper.....	Oct. 29, 1878	1033	300	14	648
204, 549	Elder, James W., Hardinsburg, Ky. Bee-hive.....	June 4, 1878	116	40	13	1029
210, 396	Elder, Joseph C., Carthage, Ill. Check-row corn-planter.....	Nov. 26, 1878	856	252	14	806
204, 429	Eldersfield, Frederick D., Saint Louis, Mo. Sewing-machine.....	June 4, 1878	14	5, 6	13	1015
	Eldridge, James F. (See Holmes & Eldridge.)					
199, 046	Elek, Szent-Györgyi, Buda-Pest, Austro-Hungary. Machine for testing the quality of rolling-stock, &c.....	Jan. 8, 1878	333	98	13	68
198, 798	Elkins, Fanny and Ida, Brooklyn, N. Y. Automatic fan.....	Jan. 1, 1878	81	21, 22	13	20
8, 050	Ellenberger, Gustav, Darmstadt, Germany. Process and apparatus for mashing. (Re-issue).....	Jan. 22, 1878	939	273	13	170
206, 391	Ellinger, William, Baltimore, Md. Ball-joint.....	July 30, 1878	1081	309	14	162
210, 307	Elliott, Alfred L., assignor to Horace P. Hemenway and Alphonso H. Carvill, Somerville, Mass. Apparatus for molding heel-stiffeners.....	Nov. 26, 1878	857	252	14	806
208, 802	Elliott, Henry, Saint Louis, Mo. Railway-switch.....	Oct. 8, 1878	375	106	14	546
206, 709	Elliott, John W., Toronto, Canada. Fire pot and grate.....	Aug. 6, 1878	53	17	14	213
209, 754	Elliott, John W., Toronto, Ontario, Canada. Stove.....	Nov. 12, 1878	248	74	14	718
210, 308	Elliott, William G., Williamsport, Pa. Compound for roofing.....	Nov. 26, 1878	858	253	14	806
202, 338	Elliott, William H., New York, N. Y. Rock-drill.....	Apr. 16, 1878	526	154	13	681
208, 228	Same..... Rock-drilling engine.....	Sept. 24, 1878	711	209	14	452
210, 601	Same..... Traveling crane.....	Dec. 10, 1878	239	65, 66	14	864
	Elliott, Gilbert R. (See Elliott, John B. and Gilbert R.)					
204, 143	Elliott, John B. and Gilbert R., Moncton, New Brunswick, Canada. Well-drilling apparatus.....	May 28, 1878	1001	284	13	909
202, 424	Elliott, Austin, Warrensburg, Mo. Spark-arrester.....	Apr. 16, 1878	610	179	13	653
203, 330	Same..... Vehicle-spring brace.....	May 7, 1878	99	29	13	833
204, 013	Same..... Car-coupling.....	May 21, 1878	846	242	13	946
206, 549	Same..... Spark-arrester.....	July 30, 1878	1242	357	14	182
206, 906	Elliott, Benjamin F., Cedar Rapids, Iowa. Grain-ventilator.....	July 16, 1878	608	262	14	106
207, 857	Elliott, Benton, Ellsworth, Wis. String-holder.....	Sept. 10, 1878	293	90	14	389
208, 577	Elliott, Bettie, Guntersville, Ala. Quilting-frame.....	Oct. 1, 1878	125	36	14	506
202, 639	Elliott, Charles J., Pottsville, Pa. Gage-cock.....	Apr. 23, 1878	864	247	13	733
208, 578	Same..... Door-alarm.....	Oct. 1, 1878	126	36, 37	14	506
209, 161	Elliott, Charles J., and Horace B. McCool, Pottsville, Pa. Water bibb or cock.....	Oct. 22, 1878	795	231	14	611
210, 680	Elliott, George L., New York, N. Y. Paddle-wheel.....	Dec. 10, 1878	326	89	14	875

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200, 308	Elliott, Lewis, jr., assignor to L. Candee & Co., New Haven, Conn. India-rubber boot.	July 23, 1878	964	273	14	143
200, 444	Elliott, Pinkney Henderson, Greenville, Tex. Plow and seeder	Feb. 19, 1878	574	169	13	337
207, 725	Elliott, Samuel, Lithgow, N. Y. Harrow	Sept. 3, 1878	144	43	14	367
200, 268	Elliott, Sarah A., Oxford, N. C. Reel	Feb. 12, 1878	387	114	13	301
	Elliott, Sterling. (See Laffin & Elliott.)					
207, 597	Elliott, Sterling, Chicago, Ill. Cutting-gage	Sept. 3, 1878	12	5	14	351
202, 633	Elliott, William H., New York, N. Y. Rock-drilling engine	Apr. 23, 1878	861	247	13	733
	Elliott, William R. E., et al. (See Mackey, Jacob, assignor.)					
205, 254	Elliott, William Taylor, Orange, Mass. Sewing-machine shuttle	June 25, 1878	694	265	13	1142
202, 425	Ellis, Charles, Boston, Mass., assignor to Globo Nail Company. Nail-plate-feeding mechanism	Apr. 16, 1878	611	179	13	093
203, 901	Ellis, George R., Indianapolis, Ind. Organ stop-action	May 21, 1878	720	206	13	931
210, 930	Ellis, Harvey, Whitesville, Mass. Cotton opener and cleaner	Dec. 17, 1878	617	171	14	920
	Ellis, J. M. (See Lester, James S., assignor.)					
	Ellis, J. W. (See Nickerson, Andrew C., assignor.)					
206, 167	Ellis, Joseph F., et al. (See Crandall, Lucius P., assignor.)	July 23, 1878	801	229	14	122
	Ellis, Joseph F., and Clark Robinson, Eau Claire, Wis. Plow-clevis					
	Ellis, Samuel H. (See Harvey, Moses B., assignor.)					
	Ellison, William F., et al. (See Alton, Richard C., assignor.)					
202, 009	Ellithorpe, Albert C., and Christian Haas, Chicago, Ill. Fire-extinguisher and escape-tower	Apr. 2, 1878	145	42	13	620
201, 100	Ellms, Frank M., and John Mills, Stoughton, Mass. Last-block fastener	Mar. 12, 1878	283	88	13	465
210, 413	Ellsworth, Elizabeth, et al. (See Ellsworth, Henry G., assignor.)					
	Ellsworth, Henry G., assignor to Elizabeth Ellsworth, Painesville, Ohio, and Charles A. Avery, New York, N. Y. Felting-machine	Dec. 3, 1878	26	5	14	827
	Ellsworth, P. H., et al. (See Way, Thomas R., assignor.)					
199, 066	Elmer, Albert E., Shelburne Falls, Mass. Pocket-knife	Feb. 5, 1878	76	25	13	245
202, 640	Same. Grinding-machine	Apr. 23, 1878	865	248	13	733
200, 650	Elmor, Nathan, Freeport, Ill. Sulky-plow	Feb. 26, 1878	797	234 235	13	379
208, 383	Elmor, William H., Berlin, Wis., assignor of one-half interest to Justus P. Luther. Apparatus for casting shaft-coupling	Sept. 24, 1878	875	254	14	473
209, 873	Elmor, William H., Berlin, Wis. Water-wheel	Nov. 12, 1878	370	110 111	14	734
201, 702	Elmer, William W., Bay City, Mich. Apparatus for the manufacture of salt	Mar. 26, 1878	989	302	13	576
203, 252	Elsey, George, assignor of one-half interest to Elisha Risley, Springfield, Mass. School-desk	May 7, 1878	16	6	13	823
210, 102	Same. Inkstand	Nov. 26, 1878	738	219	14	791
203, 434	Elstner, David S., Canton, Ohio. Device for supplying steam and air blasts to furnaces	May 7, 1878	209	60	13	849
205, 952	Elston, John W., Frankfort, Ind. Washing-machine	July 16, 1878	555	158	14	88
207, 113	Elterich, Charles, New York, N. Y., and Andrew H. Briggs, Jersey City, N. J. Drill-chuck	Aug. 20, 1878	488	147	14	274
203, 126	Elting, Peter T., Boston, Mass. Grinding-mill	Apr. 30, 1878	1368	398	13	801
203, 127	Same. same	Apr. 30, 1878	1369	399	13	801
199, 967	Elton, Anthony, New York, N. Y. Wire-rope ladder	Feb. 5, 1878	77	25	13	245
208, 725	Elwell, Arthur H., assignor of one-half interest to S. H. Jacobus, Pittsburg, Pa. Sliding-door pull	Oct. 8, 1878	287	82	14	535
204, 014	Ely, Ralph, Davisburg, Mich. Nut-lock	May 21, 1878	846	242	13	946
200, 185	Elzey, Samuel Bell, Hope, Ark. Pump	Feb. 12, 1878	304	91	13	288
	Embossing Company. (See Hyatt, Charles M., assignor.)					
	Embrey, Sanford D. (See Wheatley, John W., assignor.)					
199, 628	Emerick, Jacob T., Chicago, Ill. Tobacco-pail	Jan. 29, 1878	974	283	13	184
207, 858	Same. Cap for cigars	Sept. 10, 1878	203	90	14	390
	Emerson & Sons, Charles. (See Sellers, William, assignor.)					
208, 897	Emerson, James F., Wakefield, Mass. Shoe	Oct. 15, 1878	489	141	14	565
199, 276	Emerson, John Holmes, Saint Joseph, Mo. Horse-collar-fastening	Jan. 15, 1878	579	169	13	106
208, 971	Emerson, Lowe, College Hill, Ohio. Corner-iron for carriage-seats	Oct. 15, 1878	571	166	14	576
	Emerson, Ralph, et al. (See Smith, Joseph D., assignor.)					
200, 705	Emerson, Richard, assignor of one-half interest to H. H. Mason, Sycamore, Ill. Harvester	Feb. 26, 1878	857	252	13	388
203, 020	Emery, Albert H., New York, N. Y. Breech-loading cannon	Apr. 30, 1878	1270	367	13	788
201, 397	Emery, Charles E., Brooklyn, N. Y. Steam-engine for cotton-presses	Mar. 19, 1878	611	187	13	518
200, 859	Emery, Charles G., Brooklyn, N. Y. Cigarette	Mar. 5, 1878	44		13	422
206, 668	Same. Cigarette-package	Aug. 6, 1878	10	4	14	208
	Emery, George D. (See McCollum & Seely, assignors.)					
204, 485	Emery, Homer C., assignor of one-half interest to R. S. Cates, Union, Oreg. Turning-chisel	June 4, 1878	64	22	13	1021
206, 660	Emery, Thomas D., Harrison, assignor of one-half interest to William S. Nash, Windham, Mo. Sewing-machine attachment	Aug. 6, 1878	11	4	14	268
200, 335	Emig, Adam and Theodor, Sheridan, assignors of one-half interest to Philip Rodenberger and John Carey, Chicago, Ill. Hair-ionic	Oct. 20, 1878	977		14	639
	Emig, Theodor. (See Emig, Adam and Theodor.)					
205, 178	Emmerich, Charles, and William Hamermüller, Chicago, Ill. Feather-renovator	June 25, 1878	815	242	13	1132
	Emmert, Cora A., et al. (See Winebrenner, John A., assignor.)					
	Emmert, Jesse A. (See Bailey, Emmert & Capps.)					
200, 260	Emmitt, John V., Sterling, Ill. Carriage-top	Feb. 12, 1878	368	115	13	301
202, 339	Emmons, Thomas A., Lawrence, Mass. Loom-harness	Apr. 16, 1878	529	154	13	682
200, 938	Emory, Paschal F., Springfield, Mass. Water-filter	Aug. 13, 1878	363	92, 93	14	247
208, 229	Empoy, Henry, Detroit, Mich. Car-brake	Sept. 24, 1878	715	210	14	453
	Empire Lubricating Company. (See Johnson, John, assignor.) (Reissue.)					
200, 965	Empson, William, and John Brant, Birmingham, England. Button	Nov. 19, 1878	480	145	14	752
202, 340	Enders, Joseph, Louisville, Ky. Carriage-spring	Apr. 16, 1878	529	155	13	682
202, 341	Same. Vehicle-spring	Apr. 16, 1878	530	155	13	682
207, 261	Engelke, John, and Frank Feiner, Saint Louis, Mo., and Valentino Weismantel, Belleville, Ill. Hominy-mill	Aug. 20, 1878	642	101	14	293
210, 309	England, Parn, Lincoln, Nebr. Weather-strip	Nov. 26, 1878	858	252	14	806
210, 310	Englar, David, Jr., Avondale, Md. Guano-distributor	Nov. 26, 1878	859	252	14	807
	Engle, H. T., et al. (See Ramage, Alexander, assignor.)					
	Engle, Perry. (See Brown, David F., sr., assignor.)					
	Englebeck, Winfield J. (See Keller, Moses A., assignor.)					
207, 859	Engles, Wallace, Berneville, N. Y. Freight-car-door fastening	Sept. 10, 1878	294	90	14	390
	English, James G., et al. (See Peter, Benjamin S., assignor.)					
206, 778	English, James G., and Edwin F. Mersick, New Haven, Conn. Spring-saddle clip	Aug. 6, 1878	124	39	14	223

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210, 510	English, James G., assignor of one-half interest to Edwin F. Mersick, New Haven, Conn. Top-joint for carriages	Dec. 3, 1878	129	34	14	840
8, 313	English, William J., assignor to Maturen R. Capron, Providence, R. I. Screen for carding-machines. (Reissue.)	July 2, 1878	275	81	14	43
208, 579	Ennis, Henry J., Washington, D. C. Water-filter	Oct. 1, 1878	127	37	14	506
204, 550	Eno, Joseph A., Newark, N. J. Ironing-table	June 4, 1878	117	40	13	1029
202, 641	Enright, John, Cleveland, Ohio. Ammoniacal-gas pump	Apr. 23, 1878	866	248	13	733
210, 414	Same. Pipe coupling or joint	Dec. 3, 1878	27	6	14	827
203, 253	Enright, Joseph, San José, and John Loring Heald, Vallejo, Cal. Steam-boiler furnace.	May 7, 1878	17	7	13	823
208, 013	Ensign, Frank E., North Granville, N. Y. Car-heater	Sept. 17, 1878	479	142	14	417
201, 916	Ensign, William D., Mechanicsville, N. Y. Potato-bug catcher	Apr. 2, 1878	58	15	13	607
204, 208	Entenmann, Martin, New York, N. Y. Game apparatus. (See Baker, John G., assignor.)	May 28, 1878	1075	306	13	979
209, 874	Enzinger, Lorenz A., Worms, Germany. Filtering apparatus	Nov. 12, 1878	370	111	14	734
199, 900	Eppelsheimer, William, San Francisco, Cal. Tube for wire-rope railways	Feb. 5, 1878	19	3	13	234
199, 901	Same. Wire-rope railway-tube	Feb. 5, 1878	11	4	13	234
208, 079	Epplé, Jules V., Chicago, Ill. Abdominal truss	Sept. 17, 1878	539	161	14	426
204, 551	Erb, Will C., Hummelstown, Pa. Bee-hive	June 4, 1878	118	40	13	1029
199, 629	Ereckson, Lewis C., New Cambria, Ill. Grain-toller	Jan. 29, 1878	975	283	13	184
199, 425	Ericson, Eric, Joliet, Ill. Centering-square and protractor	Jan. 22, 1878	736	216	13	139
207, 167	Ericson, Isaac G., Colorado Springs, Colo. Wire-stretcher	Aug. 20, 1878	540	162	14	281
201, 917	Ericson, John V., Escanaba, Mich. Car-brake	Apr. 2, 1878	59	16	13	607
203, 435	Ericsson, John, New York, N. Y. Submarine torpedo and means of propelling the same.	May 7, 1878	211	61	13	849
208, 161	Eric Preserving Company. (See Sprague, Welcome, assignor.)					
	Ernwein, Peter, assignor to James F. Callaway, Louisville, Ky. Switch for combined electric alarm and annunciator	Sept. 17, 1878	630	185 186 202 203 204	14	438
205, 067	Erpelling, Lambert, assignor to C. H. & L. J. McCormick, Chicago, Ill. Grain-binder	June 18, 1878	688	203	13	1110
207, 168	Erskine, Henry M., Ilion, N. Y. Revolving fire-arm	Aug. 20, 1878	541	163	14	281
199, 360	Ertel, George, Quincy, Ill. Cotton and hay press	Jan. 22, 1878	675	198	13	129
199, 361	Erwin, James B. (See Van Altena, Henry, assignor.)					
207, 958	Erwin, James B., Milwaukee, Wis. Sled-propeller	Jan. 22, 1878	676	198	13	129
	Erwin, William, Painted Post, N. Y. Apiary or bee-house.	Sept. 10, 1878	404	122	14	403
	Esbridge, B. (See McEonn, Charles E., assignor.)					
203, 821	Esmond, E. R. (See Sisum, William H. H., assignor.)					
204, 889	Espenschied, Louis, Saint Louis, Mo. Vehicle-axle lubricator	May 21, 1878	640	180	13	920
201, 763	Esselstyn, William N., Fort Atkinson, Wis., assignor of two-thirds interest to Barnard & Lea's Manufacturing Company. Grain-separator	June 18, 1878	513	150	13	1087
201, 726	Essex, Jeremiah, North Bennington, Vt. Cop-tube	Mar. 26, 1878	990	302	13	576
208, 898	Essig, Jacob, Milford, Minn. Grain-separator	Oct. 8, 1878	288	82, 83	14	535
	Estabrook, Alanson C., assignor to Florence Manufacturing Company, Northampton, Mass. Brush	Oct. 15, 1878	489	141	14	565
8, 385	Estabrook, Joseph M. (See Wires, Ephraim L., assignor.)					
	Esterly, George, assignor of one-half interest to Benjamin Kuhn, Whitewater, Wis. Broadcast seeder and cultivator. (Reissue.)	Aug. 20, 1878	722	216	14	305
208, 899	Esterman, J. W. (See Flanagan, Mary C. Smith, assignor.)					
	Estes, Henderson, Bolton's Depot, Miss. Plow-clevis	Oct. 15, 1878	491	141	14	566
	Estey & Co., J. (See Field, Asa S., assignor.)					
	Same. (See Fuller, Levi K., assignor.)					
	Same. (See Holden, James H., assignor.)					
201, 875	Estey, John C., San Francisco, Cal. Utilizing power of water in pipes	Apr. 2, 1878	18	5	13	601
206, 097	Etheridge, Daniel T., Falls County, Tex. Cotton-gin	July 16, 1878	699	202	14	106
204, 662	Etheridge, Martin V. B. (See Wheeler & Etheridge.)					
208, 580	Etheridge, Martin V. B., Boston, Mass. Machine for smoothing and finishing boot-legs	June 11, 1878	245	77	13	1050
208, 579	Etheridge, Martin V. B., New York, N. Y. Car-wheel for elevated railways	Oct. 1, 1878	129	37	14	506
207, 169	Eubank, Reuben B., jr., assignor to George G. Duggins, Luther J. Hamner, and Daniel F. Bell, Miami, Mo. Hay raker and stacker	Nov. 12, 1878	372	112	14	735
	Eulass, Thomas H., Cincinnati, Ohio. Harvester-cutting apparatus	Aug. 20, 1878	543	163	14	281
201, 398	Eureka Blast Company. (See Jones, Evan J., assignor.)					
209, 554	Eureka Co-operative Foundry Association. (See Howdon & Wood, assignors.)					
202, 427	Eusten, Conrad, Syracuse, N. Y. Game apparatus	Mar. 19, 1878	613	187	13	518
202, 426	Eustis, William E. C., Milton, assignor of one-half interest to Henry M. Howe, Boston, Mass. Process and furnace for reducing and smelting ores	Nov. 5, 1878	16	6	14	683
198, 841	Evans, Charles A., Revere, Mass. Artificial sheep-skin	Apr. 16, 1878	614	.....	13	694
	Evans, David P., et al. (See Challinor, David, assignor.)					
207, 350	Evans, Edward, Philadelphia, Pa. Umbrella	Jan. 1, 1878	118	34	13	27
207, 802	Evans, Ella. (See Evans, George W., assignor.)					
202, 426	Evans, George F., Poland, Me. Magazine fire-arm	Aug. 27, 1878	746	223	14	313
207, 262	Same. Machine for coiling metal bars	Sept. 10, 1878	233	73	14	382
206, 007	Evans, George M., Pittsburg, Pa. Extension-ladder	Apr. 16, 1878	612	179	13	694
	Same. Window-bead fastener	Aug. 20, 1878	643	191	14	293
200, 095	Evans, George R., assignor of one-half interest to Garrett H. Hopper, San Francisco, Cal. Non-conducting compound	July 16, 1878	611	.....	14	95
207, 647	Evans, George William, Baltimore, Md. Cartridge	Mar. 5, 1878	175	56	13	442
	Evans, George W., assignor to Ella Evans, Brooklyn, N. Y. Portable pitch-kettle for roofing and paving purposes	Sept. 3, 1878	67	20	14	357
203, 254	Evans, Harry N., et al. (See Michs, Thomas R., assignor.)					
210, 311	Evans, Herbert B., Flint, Mich. Hay-loader	May 7, 1878	18	7	13	823
200, 935	Evans, Ira T., Des Moines, Iowa. Sectional harrow	Nov. 26, 1878	860	253	14	807
203, 436	Evans, Joseph, Wolverhampton, Great Britain. Steam-pump	Feb. 5, 1878	141	46	13	255
209, 030	Evans, Joseph, Cleveland, Ohio. Lathe stone-chuck	May 7, 1878	213	61	13	849
	Evans, Louis, assignor to self, John J. Thornton, D. H. Ridgeway, and W. E. Tuston, Pittsburg, Pa. Sewing-machine	Oct. 15, 1878	634	183 184	14	584
200, 242	Evans, Richard K., Washington, D. C. Fire-extinguishing apparatus	Oct. 22, 1878	873	253	14	622
199, 810	Evans & Son, S. W. (See Smith, Orren M., assignor.)					
208, 469	Evans, William, Philadelphia, Pa., and William H. Sparks, Camden, N. J., assignors to Benezet & Co., Philadelphia, Pa. Torsion-spring for vehicles	Jan. 29, 1878	1147	337	13	211
	Evarts, Charles G. (See Johnson & Evarts.)					
205, 068	Evarts, Edward S., et al. (See Kraus, John, assignor.)					
	Evarts, John A., assignor to Bradley & Hubbard Manufacturing Company, West Meriden, Conn. Extension chandelier	Oct. 1, 1878	16	5	14	491
206, 550	Same. Extension lamp-fixture	June 18, 1878	691	204	13	1111
		July 30, 1878	1243	357	14	182



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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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200, 036	Evenden, J. G. ( <i>See Wilson and Bools, assignors.</i> )	Feb. 5, 1878	142	46	13	256
200, 427	Evenden, George, Cleburne, Tex. Rotary engine	July 30, 1878	1119	820	14	106
203, 128	Everdell, William K., Mont Clair, N. J. Printer's chase					
	Everding, John. ( <i>See Hunter &amp; Everding.</i> )					
8, 225	Everding, John, assignor of one-half interest to Abraham S. Jenks, Philadelphia, Pa. Valve-gearing for steam-engines	Apr. 30, 1878	1370	399	13	802
202, 210	Everest, Hiram B., and Caroline E. Ross (executrix of Austin P. Ross, deceased), assignors to Vacuum Oil Company, Rochester, N. Y. Box and can for oils and paints. (Reissue)	May 14, 1878	617	172	13	909
202, 713	Everett, Frank D., and Anthonie Dubroy, Cleveland, Ohio. Spring-motor	Apr. 2, 1878	147	43	13	620
202, 937	Everett, George W., assignor to self and Byron D. Adams, New York, N. Y. Skirt-exhibitor.	Apr. 23, 1878	940	269	13	741
201, 399	Everett, Leonard, Lockport, N. Y. Vehicle-top adjuster	Apr. 30, 1878	1188	342	13	777
201, 400	Everhart, Martin, Victoria, Tex. Device for driving light machinery from an irregular power.	Mar. 19, 1878	613	187	13	518
205, 255	Same. Wind-wheel	Mar. 19, 1878	615	187	13	518
207, 726	Everhart, Martin, Fort Worth, Tex. Machine for storing the power of wind-engines	June 25, 1878	895	265	13	1142
210, 106	Everitt, William L., New Haven, Conn. Street-car	Sept. 3, 1878	144	44	14	307
209, 611	Everitt, Percival, Great Ryburgh, assignor of one-half interest to Frank Wheeler & Co., London, England. Screw-stock	Nov. 19, 1878	631	187	14	772
203, 331	Everitt, William, Delaware Station, N. J. Land-marker	Nov. 5, 1878	79	23	14	601
199, 630	Eveison, Charles R., assignor of one-half interest to Jerome Woolsey, Macedon, N. Y. Wash-boiler bottom	May 7, 1878	100	29	13	833
201, 658	Everstine, Daniel M., Cumberland, Md. Car-window deflector	Jan. 29, 1878	976	284	13	184
200, 711	Everts, Charles, Saint Louis, Mo. Wash-board	Mar. 26, 1878	888	270	13	561
201, 876	Ewan, John Thomas, Bethalto, Ill. Grain-separator	Aug. 6, 1878	55	17	14	213
	Ewart, William D., assignor to Abner B. Thomas and Barton Sewell, Chicago, Ill. Dental bracket	Apr. 2, 1878	19	5	13	601
200, 008	Ewell, Carlos, et al. ( <i>See Hertton, Chaco B., assignor.</i> ) (Reissue.)					
	Ewell, Edmund C. ( <i>See McDowell &amp; Ewell.</i> )					
	Ewell, William E., assignor to Munroe Organ Reed Company, Worcester, Mass. Reed-organ tremolo	July 16, 1878	611	176	14	95
201, 401	Ewing, Charles, Washington, D. C. Numbering-machine	Mar. 19, 1878	616	188	13	519
203, 255	Same. Bale-tie	May 7, 1878	19	7	13	823
202, 799	Ewing, D. K., et al. ( <i>See Weymouth, John W., assignor.</i> )					
205, 846	Ewing, John Albert, assignor of one-half interest to I. V. Sherwood, Berlin Cross-Roads, Ohio. Fire-front	Apr. 23, 1878	1026	204	13	753
210, 602	Ewing, John H., and Edward L. Bill, Wheeling, W. Va. Signal-lantern	July 9, 1878	427	121	14	67
209, 162	Same. Lantern and lamp	Dec. 10, 1878	242	66, 67	14	864
203, 163	Ewing, William H., assignor to William M. Croft, Pittsburg, Pa. Pantaloon-protector.	Oct. 22, 1878	796	231	14	611
206, 551	Same. Barrel or keg	Oct. 22, 1878	797	231	14	611
	Exall, Henry, Richmond, Va. Endless-chain propeller	July 30, 1878	1244	358	14	182
206, 710	Excelsior Drive Screw and Bolt Company. ( <i>See Fetter, David F., assignor.</i> ) (Reissue.)					
	Excelsior Grain Binder Company (limited). ( <i>See Garrard, Jephtha, assignor.</i> )					
	Excelsior Manufacturing Company. ( <i>See Little &amp; Nation, assignors.</i> )					
201, 511	Eyman, Jacob, Orville, Ohio. Wagon-bolster	Aug. 6, 1878	54	17	14	213
205, 371	Eysenbach, H. P. ( <i>See Mayrhofer, Frank, assignor.</i> )					
199, 047	Eyster, Wilber F., Chambersburg, Pa. Water-motor	Mar. 19, 1878	721	219	13	534
210, 245	Ezard, Charles, Bradford, England. Sad-iron and heater	June 25, 1878	1023	303	13	1159
200, 712	Fabre, Antonio, New York, N. Y. Machine for cutting corks	Jan. 8, 1878	334	98	13	68
209, 116	Facer, Wilson L., Cleveland, Ohio. Electric gas-lighting apparatus	Nov. 26, 1878	791	235	14	797
209, 876	Fackler, James W., Lumpkin, Ga. Lock	Aug. 6, 1878	56	17	14	214
200, 134	Fackler, James William, Lumpkin, Ga. Sewing-machine fan attachment	Oct. 22, 1878	749	218	14	605
200, 445	Fagin, Lewis, Cincinnati, Ohio. Heating-stove	Nov. 12, 1878	373	112	14	735
201, 231	Fahlberg, Constantine, Baltimore, Md. Utilizing zinc sulphate	Feb. 12, 1878	252		13	281
209, 877	Fahnesock, James D., and Llewellyn A. Powell, said Powell assignor to Osborn Willson, Aurora, Ill. Dental plate	Feb. 19, 1878	575	170	13	337
200, 522	Fahrney, Charles Edward, Timberville, Va. Harvester-reel	Mar. 12, 1878	415	128	13	484
	Fair, John M., and William Hinze, Buffalo, N. Y. Shuttle-race for sewing-machines	Nov. 12, 1878	375	112	14	735
	Fairbairn, Charles, and Henry Simon, Manchester, England. Machine for impressing screw-threads on bolts, &c	Feb. 19, 1878	648	101	13	349
198, 877	Fairbanks & Co., E. & T. ( <i>See Fairbanks &amp; Spooner, assignors.</i> )					
	Same. ( <i>See Fairbanks, Franklin, assignor.</i> )					
	Same. ( <i>See Fairbanks, Henry, assignor.</i> )					
	Same. ( <i>See Huston, Charles, assignor.</i> )					
	Same. ( <i>See Spencer, Luke G., assignor.</i> )					
199, 811	Fairbanks, Franklin, and Thomas Spooner, assignors to E. & T. Fairbanks & Co., Saint Johnsbury, Vt. Scales for weighing pasteboard	Jan. 1, 1878	161	45	13	33
203, 002	Fairbanks, Franklin, Saint Johnsbury, Vt. Scale-platform	Jan. 29, 1878	1148	337	13	211
206, 428	Same. Weighing-scales	May 21, 1878	721	207	13	931
208, 300	Same. Platform-scale	July 30, 1878	1120	321	14	166
210, 107	Fairbanks, Franklin, assignor to E. & T. Fairbanks & Co., Saint Johnsbury, Vt. Drop-lever weighing-scale	Sept. 24, 1878	703	231	14	461
205, 847	Same. Testing-machine	Nov. 19, 1878	632	167	14	772
8, 278	Fairbanks, Henry. ( <i>See Robinson, Isaiah J., assignor.</i> ) (Reissue.)					
	Fairbanks, Henry, assignor to E. & T. Fairbanks & Co., Saint Johnsbury, Vt. Device for notching scale-beams	July 9, 1878	427	122	14	67
202, 800	Fairbanks, John A., Boston, Mass. Bridle-bit	June 11, 1878	488	141	13	1079
205, 623	Fairbanks, J. W. ( <i>See Thurston, Henry W., assignor.</i> )					
207, 263	Fairbanks, Thaddeus, Saint Johnsbury, Vt. Weighing-scale	Apr. 23, 1878	1026	295	13	753
	Same. Platform weighing-scale	July 2, 1878	164	49	14	30
	Same. Weighing-scale	Aug. 20, 1878	644	191	14	293
200, 996	Fairchild, Charles. ( <i>See Munroe, James S., assignor.</i> )					
	Fairchild, Curtis T., Salisbury, assignor to Burrell, Ives & Co., Little Falls, N. Y. Machine for cutting veneers	Mar. 5, 1878	175	56	13	442
208, 900	Fairchild, Frank L., et al. ( <i>See Rogers, George, assignor.</i> ) (Reissue.)					
	Fairclimb, Charles C., Arena, Wis. Milk-pan cover	Oct. 15, 1878	491	142	14	566
202, 801	Fales, Anna Gray. ( <i>See Bremer, George Edward, assignor.</i> )					
	Falk, Herman, Nashville, Tenn. Medical compound	Apr. 23, 1878	1027		13	753
201, 018	Faloon, Matthew. ( <i>See Iseninger &amp; Faloon.</i> )					
208, 581	Same. ( <i>See Iseninger, Daniel H., assignor.</i> )					
	Faloon, Matthew, and Daniel H. Iseninger, Bloomington, Ill. Gas-lighter	Apr. 2, 1878	60	16	13	607
8, 493	Felvey, Jeremiah, Flatbush, N. Y. Baited fish-hook	Oct. 1, 1878	130	38	14	506
	Fletcher, Ward I. ( <i>See Grimm, Fancher &amp; Roberts.</i> )					
	Fanning, David H., Worcester, Mass. Corset. (Reissue.)	Nov. 19, 1878	706	210		783

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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199, 277	Fanning, David H., Worcester, Mass. Corset-clasp.....	Jan. 15, 1878	580	169	13	106
208, 517	Same.....Corset.....	Oct. 1, 1878	62	19	14	407
201, 232	Fanning, John T., Manchester, N. H. Steam-boiler.....	Mar. 12, 1878	416	128	13	484
208, 301	Same.....Pump.....	Sept. 24, 1878	793	231	14	462
210, 193	Fargo & Co., C. H. (See White, Hugh, assignor.).....(Reissue.)					
	Fargo, Joseph E., Lake Mills, Wis. Book-cover.....	Nov. 26, 1878	139	219	14	791
8, 459	Farley, H. W., et al. (See Richards, Marcus C., assignor.)					
	Farley, Henry W., Oswego, assignor to Charles H. Smith and John Hewitt, Chicago, Ill. Lightning-rod.....	Oct. 22, 1878	944	275	14	631
198, 842	Farley, James, Marquette, Mich. Lubricator.....	Jan. 1, 1878	119	34	13	27
	Farley, Robert, jr. (See Carpenter, Oramill C., assignor.)					
200, 397	Farmer, Chester, Rockford, Ill. Churn.....	Mar. 5, 1878	177	56	13	442
199, 968	Farmer, Silas Ephraim, assignor to self and Alvan A. Simonds, Dayton, Ohio. Apparatus for hardening and tempering saws.....	Feb. 5, 1878	78	25	13	245
	Farmer, William. (See Smith & Farmer.)					
	Farmers Friend Manufacturing Company. (See Harrison, John D., assignor.)..(Reissue.)					
199, 426	Farnam, Henry Marvin, Saint Albans, Vt. Ventilator.....	Jan. 22, 1878	736	217	13	139
8, 445	Farnham, Frank G., Hawley, Pa. Glove-fastening.....(Reissue.)	Oct. 8, 1878	462	133	14	558
201, 402	Farnham, George W., Lowell, Mass. Steam-engine lubricator.....	Mar. 19, 1878	619	188	13	519
210, 453	Farnham, John N., Waltham, Mass. Heat-radiator.....	Dec. 3, 1878	67	17	14	833
	Farnsworth, George. (See Ladd, Dennis O'B., assignor.)					
199, 149	Farnsworth, Henry T., Bellefonte, Pa. Governor.....	Jan. 15, 1878	456	134	13	87
209, 612	Same.....Engine-governor.....	Nov. 5, 1878	80	23, 24	14	691
205, 069	Farnsworth, Talcott T., Manassas, Va. Pipe-coupling.....	June 18, 1878	692	204	13	1111
209, 164	Same.....Cloth-measuring apparatus.....	Oct. 22, 1878	793	231	14	611
207, 170	Farquhar, Arthur B., York, Pa. Grain-separator.....	Aug. 20, 1878	544	163	14	281
209, 032	Same.....Horse-power.....	Oct. 15, 1878	636	184	14	585
209, 031	Farquhar, Samuel, assignor to John Farquhar's Sons, Boston, Mass. Attaching slates to roofs.....	Oct. 15, 1878	636	184	14	585
	Farquhar's Sons, John. (See Farquhar, Samuel, assignor.)					
	Farr, Hiram G. (See La Fonte, James Guy, assignor.)					
204, 950	Farrand, Frederick, Boston, Mass. Shetland shawl.....	June 18, 1878	584	171	13	1096
206, 309	Farrar, Fernando F., and Frank P. Gill, Waterford, Pa.; said Gill assignor to said Farrar. Process and apparatus for recovering waste sulphuric acid.....	July 23, 1878	964	274	14	143
201, 338	Farrar, John, assignor of one-half interest to J. C. Nichol, Montreal, Quebec, Canada. Tobacco-cutter.....	Mar. 19, 1878	549	169	13	509
200, 382	Farrar, Ward B., assignor to Western Electric Manufacturing Company, Chicago, Ill. Mercurial thermostat.....	Feb. 19, 1878	514	152	13	328
200, 824	Farre, William T., Providence, R. I. Button.....	Mar. 5, 1878	10	3	13	416
207, 130	Farrell, John O., Athens, Ga. Plow.....	Aug. 20, 1878	506	153	14	276
201, 172	Farrell, Michael A., Boston, Mass. Combined tap and faucet.....	Mar. 12, 1878	354	109	13	475
190, 427	Farrell, William E., Philadelphia, Pa. Manufacture of paper-pulp from salt-water fibrous plants.....	Jan. 22, 1878	737	.....	13	139
208, 518	Same.....Manufacture of paper and paper-pulp.....	Oct. 1, 1878	63	.....	14	497
205, 179	Farrington, De Witt C., Lowell, Mass. Carriage for machine-guns.....	June 25, 1878	816	242	13	1132
205, 180	Same.....Cartridge-holder.....	June 25, 1878	817	243	13	1133
204, 308	Fascher, Hermann, and Adolph A. Singer, Chicago, Ill. Grain-distributing machine.....	May 28, 1878	1172	334	13	992
	Fassett, Alfred K., et al. (See Fassett, Nelson B., assignor.).....(Reissue.)					
	Fassett, Charles F., et al. (See Fassett, Nelson B., assignor.).....(Reissue.)					
8, 136	Fassett, Nelson B., assignor, by mesne assignments, to self, Alfred K. and Charles F. Fassett, and Giles F. Filley, Saint Louis, Mo. Grain-binder.....(Reissue.)	Mar. 26, 1878	1092	332	13	591
202, 802	Fassett, Nelson B., Saint Louis, Mo. Harvester.....	Apr. 23, 1878	1028	{ 295 296 }	13	753
202, 803	Fassett, Nelson B., assignor of one-half interest to Giles F. Filley, Saint Louis, Mo. } Grain-binder.....	Apr. 23, 1878	1030	{ 296 297 298 }	13	754
208, 080	Fate, James Martin, Webster City, Iowa. Bucket-pump.....	Sept. 17, 1878	540	161	14	426
204, 015	Faucett, Hiram W., Philadelphia, Pa. Steam-pump for oil-wells.....	May 21, 1878	847	242	13	947
203, 718	Faulhaber, Albert, Heidelberg, Germany. Beer-cooling apparatus.....	May 14, 1878	518	147	13	897
	Faucett, John Thomas. (See Bolick & Faucett.)					
	Faupel, John H. (See Barnes & Faupel.)					
	Faust, G. L., et al. (See Laird, William A., assignor.)					
204, 209	Fawcett, Edward W., assignor to Silver & Deming Manufacturing Company, Salem, } Ohio. Meat-chopper.....	May 28, 1878	1076	{ 306 307 }	13	979
205, 534	Fawcett, William, New York, N. Y. Harness saddle-tree.....	July 2, 1878	74	21	14	18
8, 054	Fawkes, Joseph W., Maroa, Ill. Corn-planter.....(Reissue.)	Jan. 22, 1878	945	274	13	171
205, 790	Fawkes, George W., Prairie Hill, Mo. Portable hay-ricker.....	July 9, 1878	368	106	14	59
	Faxon, J. F., et al. (See Bradford, Charles K., assignor.)					
	Faxon, J. W., et al. (See Bradford, Charles K., assignor.)					
200, 037	Faxon, J. Warren, Quincy, Mass. Steam apparatus for buildings.....	Feb. 5, 1878	143	47	13	256
	Fay & Co., J. A. (See Brückner, Carl, assignor.)					
	Same.....(See Clark, Francis, assignor.)					
	Same.....(See Doane & Bugbee, assignors.)					
	Same.....(See Doane, William H., assignor.)					
	Same.....(See Huff, Chauncey F. H., assignor.)					
	Same.....(See Richards, John, assignor.).....(Reissue.)					
8, 458	Fay, Norman H., Abbot, Me., assignor, by mesne assignments, to Shoe Machine Manufacturing Company, Boston, Mass. Sand-paper holder.....(Reissue.)	Oct. 22, 1878	943	275	14	631
209, 613	Fay, Richard, Philadelphia, assignor of one-fourth interest to George R. Harrison, Pottstown, Pa. Breech-loading fire-arm.....	Nov. 5, 1878	81	24	14	691
200, 706	Fay, Rimonon C., Pawtucket, R. I. Bobbin and spool.....	Feb. 26, 1878	860	253	13	388
201, 337	Fay, William, Saint Louis, Mo. Wardrobe-bedstead.....	Mar. 19, 1878	548	168	13	509
	Fay, Winslow L. (See Moore, Moses M., assignor.)					
201, 173	Fayette, John Beson, Oswego, N. Y. Lifting-jack.....	Mar. 12, 1878	355	109	13	475
206, 169	Fayman, George H., Washington, D. C. Mail-bag fastener.....	July 23, 1878	805	230	14	122
	Fechteler, Julius. (See Palm & Fechteler.)					
208, 727	Feeny, Victor Isidore, Brixton, England. Swing-stile recorder.....	Oct. 8, 1878	289	83	14	535
202, 098	Fees, Jacob W., assignor of one-half interest to George A. Morse, Corning, Iowa. Harrow and weed-cutter.....	Apr. 9, 1878	257	75	13	640
202, 211	Feickert, Charles, New York, N. Y. Cord.....	Apr. 2, 1878	148	43	13	620
	Feigenspan, Christian. (See Thomson, Judson L., assignor.)					
202, 428	Feike, Franz, Middletown, Mo. Water-bed fence.....	Apr. 16, 1878	615	180	13	694
	Feiner, Frank. (See Engelke, Feiner & Weismantel.)					
206, 098	Feix, John, San Francisco, Cal. Shield for the tops of crucibles or melting-pots.....	July 16, 1878	700	202	14	106



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207, 959	Felch, Allen S., assignor of one-half interest to Andrew Greener, Columbus, Ohio. Spring bed-bottom.	Sept. 10, 1878	405	122	14	403
199, 631	Felder, Paul S. (See Ravenel, St. Julien, assignor.)					
202, 938	Felix, Benjamin F., and William Scharnweber, Chicago, Ill. Rope-spool rack.	Jan. 29, 1878	977	284	13	184
210, 931	Felix, Benjamin F., Chicago, Ill. Ear for well-buckets.	Apr. 30, 1878	1188	343	13	777
208, 162	Felldin, Abraham, Brooklyn, N. Y. Distance-measuring device.	Dec. 17, 1878	618	171	14	920
203, 607	Felheimer, August, assignor to S. Wormser & Co., New York, N. Y. Manufacture of corsets.	Sept. 17, 1878	632	186	14	438
199, 278	Felner, Samuel, Streator, Ill. Skirt.	May 14, 1878	403	114	13	823
205, 181	Fellows, Henry, Bloomington, Ind. Blind-stop.	Jan. 15, 1878	581	169	13	106
204, 960	Felt, G. H., et al. (See Smith, Seth H., assignor.)					
206, 939	Felt, John, Clayton, N. Y. Lamp or lantern.	June 25, 1878	818	243	13	1133
199, 048	Felt, Vanderlyn Howard, Kendall, N. Y. Lifting-jack.	June 18, 1878	585	171	13	1096
210, 511	Felter, David F., New York, N. Y. Horseshoe.	Aug. 13, 1878	305	93	14	247
8, 244	Felter, James B., Cazenovia, N. Y. Door-lock.	Jan. 8, 1878	336	98, 99	13	68
201, 764	Felter, Philo S., Cazenovia, N. Y. Tack-driver.	Dec. 3, 1878	130	34	14	840
199, 428	Felthimer, August, assignor to S. Wormser & Co., New York, N. Y. Manufacture of corsets. (Reissue.)	May 21, 1878	966		13	961
199, 526	Felthimer, August, assignor to S. Wormser & Co., New York, N. Y. Corset.	Mar. 26, 1878	901	302	13	577
210, 108	Felthousen, Edward G., Buffalo, N. Y. Lubricating-pump.	Jan. 22, 1878	738	217	13	159
209, 165	Felthousen, John H., Baltimore, Md. Apparatus for forming molds for gear-wheels.	Jan. 22, 1878	842	240	13	155
203, 535	Felton, Lucius Ely, Potsdam, N. Y. Inhaler.	Mar. 26, 1878	888	271	13	561
209, 336	Feneil, George, Dubuque, Iowa. Sad-iron heater.	Nov. 19, 1878	633	188	14	773
203, 021	Fender, W. J., et al. (See Bergstrom, Andrew, assignor.) (Reissue.)					
202, 099	Fender, William J., assignor of one-third interest to James Cuthbertson, Minneapolis, Minn. Middlings-separator.	Oct. 22, 1878	790	232	14	611
204, 486	Fenn, Edward J., assignor of one-half interest to H. W. Collins, Medina Ohio. Fire-kindler.	May 14, 1878	335	95	13	875
208, 803	Fensom, John, Toronto, Ontario, Canada. Hoisting-machine.	Oct. 29, 1878	977	284 285	14	639
202, 938	Fenstermacher, William, Shippensburg, Pa. Side-bar wagon.	Apr. 30, 1878	1271	367	13	788
198, 913	Fenton, Charles, New York, N. Y. Cutter for pipe cutters or wrenches.	Oct. 1, 1878	130	38	14	506
208, 803	Fenton, Hiram C., Wethersfield, assignor of one-half interest to William H. Chaplin, Stafford Springs, Conn. Printer's composing-stick.	Jan. 1, 1878	197	56	13	39
202, 099	Fenton, John H., Indianapolis, Ind. Device for cleaning horses.	Oct. 8, 1878	376	107	14	546
204, 486	Ferchlandt, Carl, New York, N. Y. Door-spring.	Apr. 9, 1878	258	75	13	640
199, 812	Ferguson, Albert, Brooklyn, N. Y. Sportsman's lantern.	June 4, 1878	64	22	13	1022
210, 169	Ferguson, Charles W. (See Pierson & Ferguson.)					
206, 779	Ferguson, Daniel P., Jonesborough, Ga. Plow.	Jan. 29, 1878	1149	337	13	211
205, 848	Ferguson, Elisha, assignor of one-half interest to Charles E. Barber, Crescent City, Ill. Check-rower.	Nov. 19, 1878	634	188	14	773
200, 038	Ferguson, J. F. (See O'Harra, David J., assignor.)					
199, 527	Ferguson, James D., Wilmington, Del., assignor of one-half interest to Robert McClintock, Baltimore, Md. Car-coupling.	Aug. 6, 1878	124	39	14	222
201, 340	Ferguson, John E., Chicago, Ill. Railway-rail joint.	July 9, 1878	430	122	14	67
211, 004	Ferguson, Sam. T., Minneapolis, Minn. Colter. (Reissue.)	Jan. 15, 1878	652	191	13	117
203, 022	Fernald, Augustine S., Portland, Me. Button. (Reissue.)	Feb. 5, 1878	144	47	13	256
210, 194	Fernandez, Pedro F., Porto Rico, West Indies. Shutter-fastening.	Jan. 22, 1878	843	246	13	155
206, 713	Fernandez, Pedro F., Porto Rico, West Indies. Shutter-fastening.	Mar. 19, 1878	551	169	13	510
205, 070	Ferret, Eugene, Paris, France. Seal-lock.	Dec. 17, 1878	701	193	14	930
209, 537	Ferrier, Charles, Minneapolis, Minn. Toe-weight for horses.	Mar. 19, 1878	550	169	13	510
209, 878	Ferris, David A., Tioga Centre, N. Y. Flooring-jack.	Oct. 29, 1878	1034	300	14	648
201, 844	Ferris, Frank. (See West, Marshall Cyrenus, assignor.)					
201, 339	Ferris, Sherwood B., Brooklyn, N. Y. Corset-exhibitor.	Aug. 27, 1878	747	223	14	313
207, 351	Ferris, William M., jr., Saint Louis, Mo. Butter-tray.	Jun. 15, 1878	581	170	12	106
199, 279	Ferriss, James H., Troy, N. Y. Cuspadoro.	Oct. 29, 1878	980	285	14	639
209, 337	Fessenden, Adelbert W. (See Fessenden, Albert H., assignor.)					
210, 845	Fessenden, Albert H., Porter, assignor of one-half interest to Adelbert W. Fessenden, Janesville, Wis. Horse-power corn-planter.	Dec. 17, 1878	507	143	14	907
198, 933	Feth, Michael. (See Conover, George, assignor.)					
8, 121	Fetherston, Thomas, Orange, N. J. Means for propelling boats.	Jan. 8, 1878	224	63	13	50
207, 495	Fetter, David F., assignor, by mesne assignments, to Excelsior Drive Screw and Bolt Company, New York, N. Y. Drive-screw. (Reissue.)	Mar. 12, 1878	523	160	13	498
207, 264	Fey, Charles, Brooklyn, N. Y. Malt-plow.	Aug. 27, 1878	897	264	14	350
199, 813	Fey, William F., Cincinnati, Ohio. Beer-cooler.	Aug. 20, 1878	645	192	14	294
201, 877	Fichter, Conrad, assignor of one-half interest to John Lighton, Syracuse, N. Y. Plaiting-machine.	Jan. 29, 1878	1149	338	13	211
205, 624	Same. Hasp-lock.	Apr. 2, 1878	20	5	13	601
207, 860	Field, Asa S., assignor to J. Estey & Co., Brattleborough, Vt. Valve for reed-organs.	July 2, 1878	165	49	14	30
200, 039	Field, Frederick, Upper Marsh, Lambeth, and Richard Talling, Lostwithiel, England. Compound for coating telegraph-wire.	Sept. 10, 1878	294		14	390
202, 252	Field, George B., New York, assignor of one-half interest to James A. Clary, Auburn, N. Y. Facing for buildings.	Feb. 5, 1878	146	47, 48	13	256
199, 528	Field, George B., Saint Louis, Mo., assignor to Woolen Fabric Company (limited), New York, N. Y. Felting-machine for making felted and napped fabrics.	Apr. 9, 1878	418	122	13	662
206, 429	Field, George Franklin. (See Gue & Field.)					
210, 512	Field, Isaac A. (See Gietstrup & Field.)					
203, 719	Field, Joseph F., Philadelphia, Pa. Glove-fastener.	Jan. 22, 1878	845	247	13	156
200, 041	Field, Joseph S., Brooklyn, N. Y. Sheet-metal can.	July 30, 1878	1121	321	14	166
	Same. (See Dunning, Russel O., assignor.)	Dec. 3, 1878	130	34	14	840
	Field, Samuel A., Philadelphia, Pa. Counterfeit-coin detector and coin-receiver.	May 14, 1878	518	147	13	898
	Field, William, Birmingham, England. Breech-loading fire-arm.	Feb. 5, 1878	149	48, 49	13	256

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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	Field, William H. (See Deuel, Jacob, assignor.)					
	Same.....(See Holden, Cyrus B., assignor.).....(Reissue.)					
208, 728	Field, William H., Port Chester, N. Y. Horse hay-rake.....	Oct. 8, 1878	291	83	14	535
205, 791	Fielder, Charles, Plumstead, England. Apparatus for cleansing the hulls of vessels.....	July 9, 1878	369	{ 106 107 }	{ 14 14 }	59
	Fielding, Jacob. (See Bright, Ingham & Fielding.)					
198, 934	Fields, Charles C., Abingdon, assignor of one-half interest to H. A. and M. G. Mann, Washington County, Va. Adding-register for pencils.....	Jan. 8, 1878	225	63	13	50
200, 040	Fields, Elden G. (See Taylor, Benjamin H., assignor.)					
207, 803	Fields, James F., Greenville, Tenn. Saw-set.....	Feb. 5, 1878	148	48	13	256
	Fields, William, and Daniel Kerbaugh, Wilmington, Del. Apparatus for loading and unloading vessels.....	Sept. 10, 1878	233	73	14	382
206, 714	Fife, James T., Corning, Iowa. Bee-hive.....	Aug. 6, 1878	58	18	14	214
199, 815	Fifield, Henry S., New Hampton, N. H. Lamp-chimney.....	Jan. 29, 1878	1152	338	13	211
204, 144	Same.....Lamp for cooking.....	May 28, 1878	1002	285	13	970
	Fifield, James F., Brooklyn, N. Y. Stop-valve.....	Jan. 29, 1878	1150	338	13	211
	Fifield, John W., North Brookfield, Mass. Peg-float.....	Jan. 8, 1878	337	99	13	68
199, 049	Figer, Benedict, San Francisco, Cal. Carpet-sweeper.....	Jan. 29, 1878	978	284	13	184
199, 632	Filley, Giles F., et al. (See Fassett, Nelson B., assignor.).....(Reissue.)					
	Filley, Giles F. (See Fassett, Nelson B., assignor.)					
	Fillman, H. J., et al. (See Phelps, Ira M., assignor.)					
209, 391	Filmer, William, San Francisco, Cal. Wave-power.....	Oct. 29, 1878	1035	301	14	648
208, 901	Fillmore, Charles W., Marengo, Ill. Vehicle-spring.....	Oct. 15, 1878	492	142	14	566
201, 341	Finch, James R., Dayton, Ohio. Grain-drill.....	Mar. 19, 1878	552	169	13	510
200, 042	Finch, William R., Eureka, Cal. Breach-loading fire-arm.....	Feb. 5, 1878	152	49, 50	13	257
201, 512	Finders, Peter, Newark, N. J. Window-screen.....	Mar. 19, 1878	722	220	13	535
198, 878	Fingar, Jacob W., assignor of one-half interest to C. L. Adams, Auburn, N. Y. Corn-sheller.....	Jan. 1, 1878	162	46	13	34
207, 171	Fink, William Gottlieb, Minnesota City, Minn. Wagon-brake.....	Aug. 20, 1878	545	163	14	281
205, 256	Finlayson, David M., Saint Paul, Minn. Journal-bearing.....	June 25, 1878	896	265	13	1143
199, 969	Finley, George, Pittsburg, Pa. Key for locks.....	Feb. 5, 1878	79	26	13	245
203, 129	Finley, James R., assignor of one-half interest to William F. Lytle, Delphi, Ind. Wash-board.....	Apr. 30, 1878	1373	400	13	802
202, 161	Finley, John E., Memphis, Tenn. Curry-comb.....	Apr. 9, 1878	329	96	13	649
205, 740	Same.....Churn-dasher.....	July 9, 1878	312	92	14	52
	Finn, William H. (See Cogswell & Finn.)					
	Finzer & Brothers, John. (See Miller & Worley, assignors).....(Reissue.)					
	Firmenich, Frank. (See Firmenich, Joseph and George, assignors.)					
	Firmenich, Frank, et al. (See Firmenich & Striker, assignors).....(Reissue.)					
	Firmenich, George. (See Firmenich, Joseph and George.)					
	Firmenich, George, et al. (See Firmenich & Striker, assignors).....(Reissue.)					
8, 494	Firmenich, Joseph, and Flavius P. Striker, assignors to Joseph, George, and Frank Firmenich, Buffalo, N. Y. Steam-boiler.....(Reissue.)	Nov. 19, 1878	706	211	14	783
210, 312	Firmenich, Joseph and George, assignors of one-third interest to Frank Firmenich, Buffalo, N. Y. Steam-generator.....	Nov. 26, 1878	862	253	14	807
202, 804	Firmin, George J., and Thomas A. D. Forster, Morristown, Pa. Amalgamator.....	Apr. 23, 1878	1037	{ 298 299 }	{ 13 13 }	755
207, 023	Same.....Apparatus for amalgamating and washing ores.....	Aug. 13, 1878	384	118	14	257
200, 383	Fischer, Carl Gustav, Schloss Holte, near Bielefeld, Westphalia. Tap with turnable outlet.....	Feb. 19, 1878	515	152	13	328
203, 130	Fischer, Charles H., New York, N. Y. Laundry bluing-package.....	Apr. 30, 1878	1374	400	13	802
210, 454	Fischer, Gustav A., Gortitz, Prussia. Stop-cock.....	Dec. 3, 1878	68	17	14	833
200, 043	Fish, John B., Providence, Pa. Hydrant and street-washer.....	Feb. 5, 1878	154	50	13	257
207, 727	Fish, John Randolph, Grand Rapids, Mich. Draw-bar for railway-cars.....	Sept. 3, 1878	145	44	14	367
207, 861	Same.....Suspension-arm for sleeping-car berths.....	Sept. 10, 1878	295	90	14	390
203, 437	Fisher, A. H., Bellows Falls, Vt., assignor to A. N. Burbank, Lawrence, Mass. Reducing wood to pulp for paper.....	May 7, 1878	214	.....	13	849
201, 513	Fisher, Alvin L., Orange, N. J. Spout for oil-cans.....	Mar. 19, 1878	723	220	13	535
198, 879	Fisher, Charles R., Chelsea, Mass. Tip for fishing-rods.....	Jan. 1, 1878	163	46	13	34
	Fisher, D. A., et al. (See Roberts, Edward J., assignor.)					
203, 822	Fisher, Daniel, Oil City, Pa. Pipe-wrench.....	May 21, 1878	640	180	13	920
206, 715	Fisher, Daniel, Cairo, Pa. Fishway.....	Aug. 6, 1878	59	19	14	214
204, 552	Fisher, George W. (See Medart, Philip, assignor.)					
	Fisher, Guyon T., Fowlerville, Mich. Heel-support.....	June 4, 1878	110	41	13	1029
	Fisher, Henry. (See Hart E. Fisher.)					
	Fisher, Lucius G., jr., et al. (See Gibson, Andrew P., assignor.)					
206, 099	Fisher, Lucius G., jr., Chicago, Ill. Bake-pan.....	July 16, 1878	702	202	14	106
201, 602	Fisher, James C., Lawrence, Mass. Filter.....	Mar. 26, 1878	834	253	13	553
201, 765	Fisher, Jay Bostwick, Davenport, Iowa. Sulky-plow.....	Mar. 26, 1878	991	303	13	577
203, 536	Same.....Fence.....	May 14, 1878	336	96	13	875
203, 903	Same.....Sulky-plow.....	May 21, 1878	722	207	13	931
207, 598	Same.....same.....	Sept. 3, 1878	13	5	14	351
	Fisher, John. (See Sipton, William, assignor.)					
200, 523	Fisher, Joseph W., Groton, N. Y. Fire-pot or portable furnace.....	Feb. 19, 1878	650	191	13	349
	Fisher, Robert A. (See Marsters & Fisher.)					
205, 849	Fisher, William M., Cincinnati, O. Smoke-preventing furnace.....	July 9, 1878	430	122	14	67
200, 270	Fiske, Bradley Allan, Naperville, Ill. Boat attaching and detaching apparatus.....	Feb. 12, 1878	389	115	13	301
206, 100	Fiske, Bradley A., Naperville, Ill. Boat-detaching apparatus.....	July 16, 1878	702	203	14	107
199, 633	Fiske, Henry G., Springfield, Mass. Revolving fountain.....	Jan. 29, 1878	979	{ 284 285 }	{ 13 13 }	185
199, 816	Same.....Lawn-sprinkler.....	Jan. 29, 1878	1152	338	13	212
199, 817	Same.....Hose-reel.....	Jan. 29, 1878	1153	339	13	212
210, 513	Fitch, Benjamin F., La Crosse, Wis. Water-feeding device for boilers.....	Dec. 3, 1878	131	35	14	841
	Fitch, E. T., et al. (See Bristol, Charles B., assignor.)					
209, 753	Fitch, Elliot R., Hubbardsville, N. Y. Platform-spring for vehicles.....	Nov. 12, 1878	248	74	14	718
203, 023	Fitch, Henry D., Louisville, Ky. Bed-bottom.....	Apr. 30, 1878	1272	368	13	788
204, 016	Same.....Gas apparatus.....	May 21, 1878	848	{ 242 243 }	{ 13 13 }	947
203, 720	Fitch, Lauren M., assignor to J. S. Haselton, Rome, N. Y. Platform wagon-trestle.....	May 14, 1878	520	147	13	898
	Fitch, W., et al. (See Bristol, Charles B., assignor.)					
202, 212	Fitt, Frederic, Ottawa, Ontario, Canada. Watch going-barrel.....	Apr. 2, 1878	149	43	13	621
207, 862	Fitts, Benaiah, Worcester, Mass. Rotary water-meter.....	Sept. 10, 1878	296	91	14	390
208, 163	Same.....Magnetic metal-separator.....	Sept. 17, 1878	633	186	14	439
204, 805	Fitts, John, Tuscaloosa, Ala. Machine for cleaning cotton, grain, &c.....	June 11, 1878	401	117	13	1069
205, 071	Fittz, George B., Attleborough, Mass. Button-fastening.....	June 18, 1878	694	205	13	1111

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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210, 110	Fittz, George B., Attleborough, Mass. Collar and sleeve button .....	Nov. 19, 1878	635	188	14	773
8, 362	Fitzgerald, Daniel, New York, N. Y. Elevated-railway .....	Aug. 6, 1878	205	66	14	332
201, 603	Fitzhugh, Henry M., Bay City, Mich. Barrel .....	Mar. 26, 1878	830	254	13	553
8, 485	Fitzpatrick, Luke, deceased (Jane Fitzpatrick, administratrix), Wheeling, W. Va., and Jacob Schinneller, Pittsburg, Pa. Chain-machine .....	Nov. 12, 1878	452	137	14	745
	Fitzpatrick, Jane, administratrix. (See Fitzpatrick, Luke) .....					
	Fitzpatrick, Michael E. (See Vinton & Fitzpatrick.) .....					
210, 111	Fitzsimons, Robert, Tomah, Wis. Seed-planter .....	Nov. 19, 1878	635	{ 188 189 }	14	773
204, 661	Fitzwater, Ford & Co. (See Fitzwater, William M., assignor.) .....					
	Fitzwater, William M., assignor to Fitzwater, Ford & Co., Greeneville, Tenn. Wash- ing-machine .....	June 11, 1878	244	76	13	1050
204, 961	Fixary, Edward, New Orleans, La. Freezing apparatus .....	June 18, 1878	586	171	13	1097
201, 603	Flagg, E. Harwood, New York, N. Y. Pad for external application of medicinal agents. Flagg, George. (See Bard, David, assignor.) .....	Jan. 29, 1878	1155	339	13	212
202, 805	Flagg, Howard W., and George Jackson, Yonkers, N. Y. Felting process .....	Apr. 23, 1878	1038		13	755
198, 765	Flagg, J. McEledge, Providence, R. I. Vertical loom .....	Jan. 1, 1878	43	11, 12	13	14
	Flagg, O. J. (See Luce, George D., assignor.) .....					
199, 529	Flagg, William F., Bloomington, Ill. Furnace .....	Jan. 22, 1878	845	247	13	156
	Flagler, H. K., et al. (See Batchelder, Hazen J., assignor.) .....					
	Flagler, Harvey K. (See Winchester, Edward S., assignor.) .....					
203, 024	Flaherty, James, Memphis, Tenn. Corpse-cooler .....	Apr. 30, 1878	1274	368	13	788
207, 409	Flanders, Albert Wellington, North Grantham, N. H. Scythe-fastening .....	Aug. 27, 1878	805	238	14	320
205, 257	Flanders, John P., and Nelson W. Goodrich, Vergennes, Vt. Horseshoe-nail machine .....	June 25, 1878	897	265	13	1143
200, 044	Flanders, Marvin C., Kendall, N. Y. Wagon-jack .....	Feb. 5, 1878	155	50	13	257
208, 729	Flanigan, Mary C. Smith, assignor of one-third interest to J. W. Esterman, Cleveland, Ohio. Fire-escape .....	Oct. 8, 1878	201	83	14	535
206, 430	Flatau, Louis S., Pittsburg, Tex. Hame-fastening .....	July 30, 1878	1122	321	14	167
199, 150	Flather, Edward, and William Houghtaling, Bridgeport, Conn. Table-leaf support .....	Jan. 15, 1878	457	134	13	87
207, 648	Flather, Edward, Bridgeport, Conn. Thread-cutter for sewing-machines .....	Sept. 3, 1878	68	20	14	357
200, 045	Fleisch, Jacob H., New York, N. Y. Neck-tie .....	Feb. 5, 1878	156	50	13	257
210, 514	Same .....	Dec. 3, 1878	132	35	14	841
205, 258	Fleisher, Simon B., Philadelphia, Pa. Device for holding coils of braid and similar articles .....	June 25, 1878	898	266	13	1143
207, 114	Same .....	Aug. 20, 1878	490	147	14	274
198, 880	Fleming, Jonathan, Monroeville, Ind. Road-scraper .....	Jan. 1, 1878	163	46	13	34
203, 332	Fleming, Peter F., Eli Wayland, and Samuel B. Gilliland, Salisbury; said Fleming as- signor to A. W. Terrill, Mexico, Mo. Hay loader and stacker .....	May 7, 1878	101	29	13	833
	Fletcher, David R. (See Morel & Fletcher.) .....					
206, 716	Fletcher, Horace P., San Francisco, Cal. Ball-target .....	Aug. 6, 1878	60	19	14	214
204, 309	Fletcher, John, Ashton-under-Lyne, Great Britain. Brass-melting furnace .....	May 28, 1878	1173	334	13	992
208, 302	Fletcher, Thomas, Warrington, England, assignor to George B. Snow, Thomas G. Lewis, and John E. Robie. Preparing fire-clay for furnaces, crucibles, fire-bricks, &c. ....	Sept. 24, 1878	795		14	462
208, 076	Fletcher, Thomas, Redditch, assignor to Henry Clark, London, England. Needle-case .....	Oct. 8, 1878	237	68	14	528
206, 717	Fletcher, Tristram H., Hollis, Me. Pegging-machine .....	Aug. 6, 1878	60	19, 20	14	214
200, 524	Flinn, John, Philadelphia, Pa. Wire-ladder .....	Feb. 19, 1878	651	192	13	349
200, 825	Flinner, John, Millersburg, Ohio. Gate .....	Mar. 5, 1878	10	4	13	416
	Flint, George W. (See Doty & Flint.) .....					
	Flint, John G. (See Storle, Ole O., assignor.) .....					
	Flint, Rockwell J., et al. (See Burton, George F., assignor.) .....					
201, 660	Flint, William Wallace, assignor to Chicago Stamping Company, Chicago, Ill. Hinge for sheet-metal ware, boxes, and other articles .....	Mar. 26, 1878	889	271	13	561
200, 004	Flocke, Robert, Newark, N. J., assignor to R. Newman & Co., New York, N. Y. Bag- lock .....	Mar. 5, 1878	87	30	13	428
209, 117	Flora, Orlando V., Madison, Ind. Stirrup .....	Oct. 22, 1878	750	218	14	605
	Florence Machine Company. (See Goodell, Dexter W., assignor.) .....					
	Florence Manufacturing Company. (See Estabrook, Abanson C., assignor.) .....					
207, 024	Floryanowicz, Raymond, New Haven, Conn. Rein-holder .....	Aug. 13, 1878	385	118	14	257
200, 440	Flower, George H., Chicago, Ill. Lubricator .....	Feb. 19, 1878	576	170	13	337
	Floyd, Hezekiah. (See Zuern, Daniel, assignor.) .....					
206, 431	Floemerfelt, Daniel A., assignor of two-thirds interest to William F. and James Hutchi- son, Delaware Station, N. J. Dryer for grain, &c. ....	July 30, 1878	1123	321	14	167
200, 525	Flynn, John T., Colchester, Conn. Boot-tree .....	Feb. 19, 1878	652	192	13	349
201, 766	Flynn, John T., Naugatuck, Conn. Rubber boot .....	Mar. 26, 1878	995	304	13	577
206, 101	Flynn, Thomas W., Pottsville, Pa. Air-exhauster for coal-mines .....	July 16, 1878	704	203	14	107
8, 405	Flynt, Chester D., Brooklyn, N. Y., assignor, by mesne assignments, to George Hun- zinger. Spring-seat .....	Sept. 10, 1878	458	138	14	410
201, 101	Fogarty, Thomas B., Jersey City, N. J. Vapor-jet gas-machine .....	Mar. 12, 1878	284	88	13	465
206, 940	Fogelstrand, Otto F., and William E. Sparks, New Britain, Conn. Sash-fastener .....	Aug. 13, 1878	306	93	14	248
206, 009	Fogerty, George F., Boston, Mass. Fluid-discharging apparatus .....	July 16, 1878	613	176	14	95
	Fogg, David S. (See Salmon, Ira A., assignor.) .....					
202, 253	Fogg, Jason T., assignor of one-half interest to Lyndon, Oak & Co., Garland, Me. Egg- carrier .....	Apr. 9, 1878	420	122	13	662
204, 719	Foglebach, David, Erie P. O., Erie County, Pa. Sand-band for vehicle-hubs .....	June 11, 1878	307	94	13	1050
	Foley, James, et al. (See Robertson, John, assignor.) .....					
200, 608	Foley, James, Montreal, Quebec, Canada. Water-filter .....	Feb. 26, 1878	755	221	13	373
201, 103	Same .....	Mar. 12, 1878	286	89	13	466
210, 515	Foley, James, assignor of one-half interest to Frederic Adee, Brooklyn, N. Y. Service- tank .....	Dec. 3, 1878	133	35	14	841
201, 174	Folk, Edgar M., Brooklyn, N. Y. Exercising device .....	Mar. 12, 1878	355	109	13	476
206, 452	Follett, Edward P., Rochester, N. Y. Lamp-burner .....	July 20, 1878	1123	322	14	167
205, 953	Follett, George B., Green Bay, Wis. Heating-drum .....	July 16, 1878	556	159	14	88
200, 046	Follett, Joseph L., New York, N. Y. Universal joint for connecting rotary shafts .....	Feb. 5, 1878	157	51	13	258
201, 604	Same .....	Mar. 26, 1878	837	234	13	553
203, 904	Same .....	May 21, 1878	727	208	13	932
203, 905	Same .....	May 21, 1878	728	208	13	932
211, 076	Same .....	Dec. 17, 1878	792	217	14	941
	Follett, Refine J. (See Gay & Follett.) .....					
209, 033	Folliott, James H., Port Clinton, Ohio. Churn .....	Oct. 15, 1878	637	184	14	585
210, 681	Folson, George F., Boston Highlands, Mass. Railway-track tie and support .....	Dec. 10, 1878	327	89	14	875
208, 584	Fontayne, Charles, New York, N. Y. Ornamenting glass, &c. ....	Oct. 1, 1878	132		14	507
206, 310	Foot, Edward H., Somerville, Mass. Pickle-can .....	July 23, 1878	966	275	14	143
207, 410	Foot, Russell N., Kansas City, Mo. Steam-cooker .....	Aug. 27, 1878	806	249	11	320
199, 970	Forbes, Arthur A., Valleyfield, Quebec, Canada. Cloth-shearing machine .....	Feb. 5, 1878	79	26	13	245
207, 649	Forbes, Henry D., Cambridge, Mass. Whirligig .....	Sept. 3, 1878	68	20	11	357

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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205, 372	Forbes, John, jr., Plainwell, Mich. Rowlock	June 25, 1878	1023	303	13	1159
	Forbes, J. W., <i>et al.</i> (See McAulis, James D., assignor.)					
210, 772	Forbes, William, Plainwell, Mich. Windmill	Dec. 10, 1878	421	117	14	887
209, 471	Ford, Alvin, Chicago, Ill. Heating apparatus	Oct. 29, 1878	1115	325	14	660
210, 846	Ford, Benjamin, Union Township, Allegheny County, Pa. Feed-water heater for steam-boilers	Dec. 17, 1878	508	143 144	14	907
204, 145	Ford, Charles, Jarvis Morgan Slade, and Franklin Baylies, New York, N. Y. Rubber-cutting machine	May 28, 1878	1003	285	13	970
208, 519	Ford, David, Eaton Rapids, Mich. Motor	Oct. 1, 1878	64	19	14	498
204, 310	Ford, Elisha S. M., Christiansburg, Ky. Washing-machine	May 28, 1878	1175	335	13	992
208, 585	Ford, Frederic G., Roxborough, Pa. Flour and meal sifter	Oct. 1, 1878	133	38	14	507
201, 403	Ford, George W., Elba, N. Y. Machine for expanding and contracting metal	Mar. 19, 1878	620	189	13	519
	Ford, Isaac V. (See Boxley, George, assignor.)					
202, 530	Ford, Samuel A., Allegheny, Pa. Converting non-chilling iron into chilling iron	Apr. 16, 1878	728		13	708
199, 634	Ford, Silvanus H., Beaver Dam, Wis. Cultivator	Jan. 29, 1878	980	285	13	185
	Foreman, Edward. (See Foreman, Edwin L. and Edward.)					
208, 164	Foreman, Edwin L. and Edward, Penfield, Ill. Gangway for transferring cattle	Sept. 17, 1878	635	186	14	439
210, 246	Forker, William H., Meadville, Pa. Trunk-lock	Nov. 26, 1878	793	235	14	798
202, 531	Forlow, Jacob, assignor of two-thirds interest to Levi Barnhart, Eaton, and William Lantis, Winchester, Ohio. Machine for cutting up corn-stalks	Apr. 16, 1878	729	211	13	708
208, 081	Forman, Joseph, assignor to self and John H. Wood, Helena, Ky. Car-coupling	Sept. 17, 1878	540	161	14	426
201, 767	Forman, Madison, Memphis, Mo. Grain scouring and cleaning machine	Mar. 26, 1878	995	304	13	577
	Fornerod-Stadler, August. (See Rubin & Fornerod-Stadler.)					
	Forney, James. (See Bishop, Joshua, assignor.)					
	Forney, John J. (See Baird, William F., assignor.)					
202, 806	Forney, Joseph, Canfield, Ohio. Trace-coupling	Apr. 23, 1878	1039	299	13	755
204, 806	Forrest, Joseph, Oakville, Md. Self-lighting lamp for light-houses	June 11, 1878	401	117 118	13	1069
207, 265	Forrester, Peter, Washington, D. C. Riveting broken articles of china, glassware, &c.	Aug. 20, 1878	646	192	14	294
202, 807	Forschner, Charles, New York, N. Y. Spring-balance	Apr. 23, 1878	1040	290	13	755
205, 373	Forster, Frank, Springwell, Mich. Windmill	June 25, 1878	1024	303	13	1159
	Forster, James. (See Turnbull & Foster.)					
208, 586	Forster, Thomas, Streatham, England. Manufacture of gloves for surgical operations	Oct. 1, 1878	134	39	14	507
	Forster, Thomas A. D. (See Firmin & Forster.)					
200, 186	Forstner, Thomas. (See Berghold & Forstner.)					
	Forsyth, James, assignor to self and John P. Houghton, New York, N. Y. Roller-skate	Feb. 12, 1878	305	91	13	288
	Forsyth, James G., <i>et al.</i> (See Tripp, Augustus F., assignor.)					
	Forsyth, John, Paris, Tex. Device for use in reciprocating churns	Feb. 12, 1878	390	115	13	301
200, 271	Same. Corn-popper	June 18, 1878	695	205	13	1111
205, 072	Forsyth, William, Altoona, Pa. Signal head-light	Nov. 26, 1878	863	253	14	807
210, 313	Fortin, Michel, Stillwater, Minn. Traction-engine	Apr. 16, 1878	615	180	13	694
202, 429	Fosburg, Calvin E., Louisville, Ky. Canopy-top for carriage (Reissue).	Feb. 5, 1878	236	72	13	269
8, 074	Fosgate, Daniel Oscar, Red Wing, Minn. Sulky-plow	Sept. 3, 1878	69	21	14	357
207, 650	Foskett, William M., Lemars, Iowa. Combined ironing-board and cutting-table	Mar. 26, 1878	838	254	13	554
201, 605	Foss, Frank, Lynn, Mass. Horse-brush	June 25, 1878	1025	303	13	1159
205, 374	Foss, Henry A., assignor to P. E. Chapin Pine Meadow, Conn. Bench-plane	Sept. 3, 1878	10	5	14	351
207, 599	Foster, Alfred P., Alton Junction, Ill., assignor of one-third interest to Marianne Levin, Saint Louis, Mo. Device for finishing the sockets of sewer-pipes	Mar. 19, 1878	553	170	13	510
201, 342	Foster, Austin G., <i>et al.</i> (See Raymond, Wilbur F., assignor.)					
209, 034	Foster, Bradley W., Huntington, W. Va. Latch	Oct. 15, 1878	638	185	14	585
8, 206	Foster, Charles, deceased, assignor, by mesne assignments, to Lebbeus H. Rogers, New-York, N. Y. Letter-sheet envelope (Reissue).	Apr. 30, 1878	1491	436	13	816
206, 552	Foster, Charles W., Hew Haven, Conn. Stocking-supporter	July 30, 1878	1246	359	14	182
198, 881	Foster, Charles William, New Haven, Conn. Corset	Jan. 1, 1878	164	46	13	34
	Foster, Edward. (See Randall & Foster.)					
204, 890	Foster, Francis M., Montgomery County, assignor of one-half interest to William A. Pfeffer, Coffeyville, Kans. Sulky-plow	June 18, 1878	515	150	13	1087
	Foster, George S. (See Milligan, John F., assignor.)					
200, 526	Foster, George W., Green Point, N. Y. Fire-escape	Feb. 19, 1878	653	192	13	349
203, 025	Foster, Hickman E., assignor of one-half interest to Rufus C. Crocker, Decatur, Ill. Corn-planter	Apr. 30, 1878	1274	368	13	788
	Foster, Horace. (See Milliree, Samuel L., assignor.)					
201, 233	Foster, James B., Delaware, Ohio. Wind-engine	Mar. 12, 1878	417	129	13	484
204, 553	Foster, John, Ypsilanti, Mich. Side-spring for vehicles	June 4, 1878	119	41	13	1030
210, 314	Foster, John M., and George E. Lockwood, assignors of one-third interest to Charles E. Morgan, Philadelphia, Pa. High-pressure gas-regulator	Nov. 26, 1878	863	254	14	807
207, 025	Foster, John S., Hudson, Mich. Wheeled harrow and seeding-machine combined	Aug. 13, 1878	386	119	14	257
202, 213	Foster, John T., Arlington, N. J. Temporary binder	Apr. 2, 1878	150	44	13	621
	Foster, M. W. (See Ryder, Benjamin F., assignor.)					
	Foster, Oran F. (See Kimball, Ephraim Milton, assignor.)					
	Foster, William. (See Jamieson & Foster.)					
201, 768	Foster, William A., Chester, Conn. Carriage-jack	Mar. 26, 1878	997	305	13	578
209, 392	Foster, William H., and Isaac C. Roberts, Louisburg, Kans. Churning apparatus	Oct. 29, 1878	1035	301	14	648
206, 010	Foubert, Andrew, Buffalo, N. Y. Beer-boiler	July 16, 1878	614	177	14	95
210, 455	Fouchet, Jean A., Paris, France. Lighting apparatus	Dec. 3, 1878	69	17	14	833
	Foulds, Robert. (See Smith, Horace A., assignor.)					
200, 790	Foulks, John W., Brooklyn, N. Y. Ore-mill	Feb. 26, 1878	937	276	13	400
201, 661	Foust, Nathaniel, Edenburg, Pa. Piston for steam-engines	Mar. 26, 1878	890	271	13	561
	Fouts, Hiram G. (See Theakston & Fouts.)					
202, 430	Foutz, Henry W., Bellefonte, Pa. Governor	Apr. 16, 1878	616	180	13	694
199, 530	Fowden, Samuel, Philadelphia, Pa. Injector	Jan. 22, 1878	847	247	13	156
	Fowle, William B. (See Wales, William A., assignor.)					
209, 035	Fowler, Albert R., Rochester, N. Y. Washing-machine	Oct. 15, 1878	639	185	14	585
8, 491	Fowler, Alonzo H., and Edward J. Morgan, Ithaca, N. Y.; said Morgan assignor to said Fowler. Packing deep wells (Reissue).	Nov. 12, 1878	461	139	14	746
	Fowler, Charles H. (See Payson & Fowler.)					
207, 172	Fowler, Charles H., assignor of one-half interest to Daniel Goodnow, jr., Boston, Mass. Tap-wrench	Aug. 20, 1878	546	164	14	281
203, 962	Fowler, Gilbert C., San Francisco, Cal. Boiler-covering compound	May 21, 1878	729		13	932
206, 553	Fowler, John W., and Daniel F. Lewis, Brooklyn, N. Y. Passenger-register	July 30, 1878	1247	359	14	182
207, 728	Same. same	Sept. 3, 1878	146	44	14	368
202, 532	Fowler, Joinville F., Alliance, Ohio. Dash-rail	Apr. 16, 1878	730	211	13	708
210, 773	Same. Dash-rail fastener	Dec. 10, 1878	422	117	14	887
207, 509	Fowler, Jonathan O., jr., New York, N. Y. Fire, burglar, and district alarm telegraph	Aug. 27, 1878	909	268 269	14	332



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207, 510	Fowler, Jonathan O., jr., New York, N. Y. Thermostatic and electrical fire-alarm	Aug. 27, 1878	916	269	14	333
202, 431	Fowler, Maltby, Northford, Conn. Making sheet-metal spoons	Apr. 16, 1878	617	181	13	684
208, 082	Fowler, Nelson M., Beloit, Kans. Plow, harrow, and seed-planter	Sept. 17, 1878	541	162	14	427
200, 272	Fowles, Samuel Jones, Westfield, Mass. Explosive compound	Feb. 12, 1878	390		13	301
199, 050	Fowler, Samuel W., assignor to F. H. Lovell & Co., New York, N. Y. Combined shade and chimney for lamps	Jan. 8, 1878	338	99	13	68
202, 162	Fowler, Thaddeus, Seymour, Conn. Hinge	Apr. 9, 1878	330	97	13	650
200, 047	Fowler, William R., Baltimore, Md. Attachment for plows	Feb. 5, 1878	158	51	13	258
201, 769	Fox, Addison, C., assignor of one-half interest to Thomas F. Egelberner, Baltimore, Md.; said Fox and Egelberner assignors of one-third interest to E. B. Cram, Portland, Me. Postage and revenue stamps	Mar. 26, 1878	997	305	13	578
198, 973	Fox, Charles J. (See Lester & Fox.)					
204, 962	Fox, George H., Boston, Mass. Breech-loading fire-arm	Jan. 8, 1878	285	76	13	57
200, 187	Same . . . Adjustable ladder-truss	June 18, 1878	588	172	13	1097
210, 195	Fox, John, New York, N. Y. Postage-stamp	Feb. 12, 1878	306	91	13	288
202, 714	Fox, John, Monroe, Iowa. Tire-tightener	Nov. 26, 1878	740	220	14	791
202, 182	Fox, Nathan, assignor to self and James Ray, Savannah, Ga. Bottle-stopper	Apr. 23, 1878	940	269	13	741
201, 175	Fox, Robert, Deerfield, Iowa. Horse-detaching device	June 25, 1878	820	243	13	1133
205, 625	Fox, Saint George Lane, London, England. Electric gas-lighting device	Mar. 12, 1878	356	110	13	476
202, 533	Fox, Samson, Leeds, Great Britain. Fire-box for steam-bollers	July 2, 1878	166	49	14	30
205, 470	Fox, William, Wheeling, W. Va. Glory-hole or reheating-furnace for glass-ware	Apr. 16, 1878	731	211	13	708
200, 384	Foy, James H., New Haven, Conn. Skirt-supporting corset	July 2, 1878	16	5	14	11
208, 864	Foy, Lavinia H., New Haven, Conn. Corset	Feb. 19, 1878	515	152	13	328
208, 865	Foy, William H., San Francisco, Cal. Harvester	Oct. 8, 1878	377	107	14	546
	France, George, Boston, Mass. Truss	Oct. 8, 1878	379	107	14	547
205, 375	Francis, John A. (See White & Francis.)					
	Francis, Lewis G., New York, N. Y. Multiplying mirror for exhibiting samples	June 25, 1878	1025	304	13	1150
207, 863	Francis, Thomas. (See Stringer & Francis.)					
8, 226	Frank, Armondo, Howell, Mich. Horse hay-fork	Sept. 10, 1878	299	91	14	390
207, 411	Frank, David. (See Waldman & Frank.)					
210, 603	Frank, Henry, Cincinnati, Ohio. Catch-basin	May 14, 1878	618	172	13	909
208, 583	Frank, Ignatz, New York, N. Y. Machine for cutting and winding paper	Aug. 27, 1878	807	239	14	320
	Frank, Joseph, New York, N. Y. Hame-fastener	Dec. 10, 1878	245	67	14	865
206, 170	Frank, Silas, Hagerstown, Md., assignor of two-thirds interest to William M. McDowell and Charles E. Baechtel. Drill-tooth attachment	Oct. 1, 1878	131	38	14	506
203, 721	Frank, Phillip Christian, Saint Paul, Minn. Skate	July 23, 1878	805	230	14	123
	Franko, Theodore P., assignor of one-half interest to Frank Noe, Buffalo, N. Y. Steam-generator	May 14, 1878	520	148	13	898
203, 026	Frankenstein, Morris, Chicago, Ill. Slate	Apr. 30, 1878	1275	369	13	788
208, 165	Franklin, Henry L., assignor to Elnathan Whitaker and Addison W. Bartlett, Brattleborough, Vt. Mop	Sept. 17, 1878	635	187	14	439
205, 259	Franklin, Joel B., White Pine, Tenn. Convertible clothes-boiler and washing-machine	June 25, 1878	890	266	13	1143
200, 273	Franklin, Matthew Calhoun. (See Lane & Franklin)					
206, 941	Franklin, William H., Philadelphia, Pa. Horse-boot	Feb. 12, 1878	391	115	13	201
205, 851	Frantz, William B., Joplin, Mo. Beer-cooler	Aug. 13, 1878	307	93	14	248
201, 104	Frantz, Jacob, and John C. Stevens, Allegheny, Pa. Brick-kiln furnace	July 9, 1878	432	123	14	67
	Frary, Henry H., and Louis Hellman, Chicago, Ill. Machine for cutting labels	Mar. 12, 1878	287	89	13	466
205, 792	Fraser, James D. (See Hart & Fisher, assignors.)					
	Fraser, Herman, Cleveland, Ohio. Apparatus for distillation of oils	July 9, 1878	370	107	14	59
207, 651	Fraser, Daniel. (See Henry & Fraser.)					
	Fraser, Daniel, jr., Boston, Mass. Machine for rolling horsehoe-nail plates or bars	Sept. 3, 1878	70	21	14	358
201, 770	Fraser, William H. (See Range, Hercule N., assignor.)					
8, 112	Frazier, George T., assignor of one-half interest to Henry F. Miller, West Mitchell, Iowa. Printing-press	Mar. 26, 1878	998	305	13	578
202, 642	Frazier, Joseph W., New York, N. Y. Cartridge-box	Mar. 5, 1878	261	82	13	454
204, 017	Same . . . same	Apr. 23, 1878	868	249	13	733
198, 799	Same . . . Cartridge-package	May 21, 1878	851	243	13	947
202, 432	Frécot, Alexandre Athénodore, Paris, France. Safety-brake for machinery	Jan. 1, 1878	81	22	13	20
200, 386	Frederick, Levi W., Mooresville, Ind. Draft-equalizer	Apr. 16, 1878	618	181	13	694
205, 850	Fredericks, Christian A., Brooklyn, N. Y. Weighing-scale	Feb. 19, 1878	518	153	13	329
203, 333	Same . . . same	July 9, 1878	431	123	14	67
207, 729	Frederickson, Orloff, New York, N. Y. Portable hand-windlass	May 7, 1878	101	29	13	834
199, 531	Free, Daniel, Emigsville, Pa. Hame-fastener	Sept. 3, 1878	149	45	14	368
200, 385	Freeman, Abraham, Boston, Mass. Attachment to kerosene-stoves	Jan. 22, 1878	848	248	13	156
	Freeman, Albert A., assignor of one-half interest to John H. Scott, jr., Philadelphia, Pa. Car-axle box	Feb. 19, 1878	517	153	13	328
203, 027	Freeman, George L. (See Smith, Freeman & Burrell.)					
201, 771	Freeman, Harlow M., Lathrop, Mo. Riding attachment to plows	Apr. 30, 1878	1276	369	13	789
202, 643	Freeman, Henry O., Sherburn, assignor to American Dairy and Commercial Company, New York, N. Y. Milk-stirrer	Mar. 26, 1878	1001	306	13	578
208, 972	Freeman, John, Chicago, Ill. Indicator	Apr. 23, 1878	869	249	13	734
210, 456	Freeman, John Murray, Parkersburg, Ind. Saddle-stirrup	Oct. 15, 1878	572	166	14	576
209, 036	Freeman, Marvin W., Beatrice, Nebr. Band-cutting attachment for thrashing-machines	Dec. 3, 1878	70	18	14	833
	Freeman, Moodie R., assignor of one-half interest to Arthur F. Mansur, Detroit, Mich. Photo-mechanical printing	Oct. 15, 1878	640		14	585
206, 011	Freeman, William Carroll, Louisiana, Mo. Scoop	July 16, 1878	615	177	14	96
200, 998	Freer, Reason, Cassopolis, Mich. Water-heating apparatus	Mar. 5, 1878	178	56	13	442
202, 163	Freese, Lewis. (See Johnson, William D., assignor.)					
210, 682	Freese, William Lawrence, Mohawk Village, Ohio. Grading-machine	Apr. 9, 1878	331	97	13	650
200, 860	French, Aaron F., assignor to self and Edwin K. Burch, Denison, Iowa. Harrow	Dec. 10, 1878	328	89	14	875
202, 534	French, Carlos. (See Whiting, William S., assignor.)					
200, 707	French, Carlos, Seymour, Conn. Car-spring	Mar. 5, 1878	45	16	13	422
209, 870	Same . . . Manufacture of horsehoe-nails	Apr. 16, 1878	732	211	13	708
	French, Charles M., Pittsburg, Pa. Manufacture of combined plowshare and point	Feb. 26, 1878	861	253	13	888
	French, David S., Delphi, Ind. Hog-cholera compound	Nov. 12, 1878	376		14	735
204, 430	French, Oratus S. (See Brayton, June & French.)					
200, 048	Fresco, Bernard, assignor of one-half interest to Henry Lawrence, Chicago, Ill. Rotary engine	June 4, 1878	16	6	13	1015
210, 774	Freshman, Andrew P., assignor of one-half interest to George Eisenberg, Belleville, Ill. Compass	Feb. 5, 1878	159	51	13	258
	Freudenberg, Franz B., Laar, near Ruhrort, Germany, assignor to Charles James A. Dick, Philadelphia, Pa. Fastening rails to metallic sleepers	Dec. 10, 1878	423	117	14	867
203, 537	Frey, Charles. (See Keller & Frey.)					
	Frey, Jacob, New York, N. Y. Cigar	May 14, 1878	337	96	13	875

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199, 280	Frey, John A., New York, N. Y. Coal-oil stove.....	Jan. 15, 1878	582	170	13	107
200, 274	Same..... Oil-can.....	Feb. 12, 1878	392	116	13	301
203, 672	Frey, John J., Baltimore, Md. Smoke and cinder conductor for railway-trains.....	Nov. 5, 1878	151	44	14	701
207, 271	Frezon, Frumence Nicols, and Louis Rodriguez d'Oliveira, Paris, France. Treating beet-roots for the manufacture of sugar.....	Aug. 20, 1878	652	.....	14	295
	Friedberger, Henry, <i>et al.</i> (See Blackburn & Moeslein, assignors.)					
	Friedberger, Henry. (See Menkhoff, William, assignor.)					
207, 652	Friedeborn, Charles, Clare, Mich. Churn-dasher.....	Sept. 3, 1878	71	21	14	358
204, 311	Friedley, Andrew, Lemont, Ill. Wash-boiler.....	May 28, 1878	1175	335	13	992
207, 412	Friedrich, Jacob L., West Branch, Mich. Bag-holder.....	Aug. 27, 1878	809	239	14	320
210, 315	Friend, Herrman, New York, N. Y. Hat.....	Nov. 26, 1878	865	254	14	807
210, 247	Frink, Christopher L., Rockville, Conn. Metallic fence.....	Nov. 26, 1878	793	235	14	798
209, 880	Frink, Douglas F., New York, N. Y. Process of coloring photographic pictures.....	Nov. 12, 1878	376	.....	14	735
199, 051	Frisbie, Edgar G., and Charles H. Johnson, Monroe, Mich. Combined bag-holder and truck.....	Jan. 8, 1878	338	99	13	68
204, 018	Frisbie, Hamlin F., Danville, Ill. Puppet-valve.....	May 21, 1878	851	243	13	947
210, 196	Frisbie, Henry R., Bridgeport, Conn. Stench-trap.....	Nov. 26, 1878	741	220	14	791
200, 447	Fritschy, Conrad, Delaware, Ohio. Shifting-rail for carriage-seats.....	Feb. 19, 1878	577	170	13	338
202, 100	Fritzner, Nicolay, Berlin, Prussia, Germany. Bottle-stopper.....	Apr. 9, 1878	259	75	13	640
199, 819	Fitzell, Joseph P., Boston, Mass. Compressing air.....	Jan. 29, 1878	1155	339	13	212
203, 255	Frobisher, Benjamin C., Brockton, assignor to Begelew C. Morse, Boston, Mass. Brush.....	May 7, 1878	20	7	13	823
206, 554	Froese, Henry, Buffalo, N. Y. Press.....	July 30, 1878	1251	360	14	183
208, 806	Froggatt, Cephas, Stockport, England. Felting hat-bodies.....	Oct. 8, 1878	380	108	14	547
205, 626	Frost, Cardine C., New York, N. Y. Valve for water-closets, &c.....	July 2, 1878	166	50	14	30
	Frost, Edward J. (See Peterson & Frost.)					
200, 448	Frost, Francis C., assignor to self and Joseph E. Craig, Anoka, Minn. Circular-saw mill.....	Feb. 19, 1878	578	170	13	338
205, 535	Frost, Francis C., Anoka, Minn. Corn planter and marker.....	July 2, 1878	74	22	14	19
201, 662	Frost, Francis N., assignor of one-half interest to George Swain, New Britain, Conn. Bottle-stopper fastener.....	Mar. 26, 1878	891	271	13	562
	Frost, George, <i>et al.</i> (See Bennett, Erastus S., assignor.) (Reissue.)					
199, 196	Frost, Henry S., Watertown, Conn. Umbrella tip-cup.....	Jan. 15, 1878	501	147	13	94
200, 609	Frost, Henry S., assignor to A. N. Woolson, Watertown, Conn. Umbrella-runner.....	Feb. 26, 1878	756	221	13	373
201, 000	Frost, Robert, Chester, England. Apparatus for reducing semolino, middlings, or sharps to flour.....	Mar. 5, 1878	179	57	13	442
202, 939	Frost, Samuel J., and Henry T. Smith, Brooklyn, N. Y. Patty-pan.....	Apr. 30, 1878	1189	343	13	777
	Frotscher, Richard. (See Steckler, Henry, jr., assignor.)					
206, 869	Fruen, William Henry, Minneapolis Township, Hennepin County, Minn. Middlings-separator.....	Aug. 13, 1878	231	74	14	239
210, 847	Same..... Governor.....	Dec. 17, 1878	509	144	14	908
	Fry, Henry C. (See Johnston, James J., assignor.)					
208, 587	Fry, John T., Brooklyn, Iowa. Rotary-churn.....	Oct. 1, 1878	135	39	14	507
204, 312	Frye, William H. H., Marshalltown, Iowa. Wire fence.....	May 28, 1878	1176	335	13	992
205, 536	Fryer, Robert M., San Francisco, Cal. Preparing gold and silver ores for milling.....	July 2, 1878	76	.....	14	19
208, 470	Fuchs, Friedrich B., New York, N. Y. Fire-escape.....	Oct. 1, 1878	18	5	14	491
201, 105	Fuchs, Henry, assignor to Arthur M., George W., and Alson E. Barnhart, and Charles E. Spindler, Chicago, Ill. Clutching device.....	Mar. 12, 1878	288	89	13	466
209, 756	Fudge, John M., Francis M. Holmes, and Sam McDonald, Niles Township, Delaware County, Ind. Ditching-plow.....	Nov. 12, 1878	249	74	14	718
201, 919	Fuld, Samuel, New York, N. Y. Combined candle-holder, match-safe, and nail-file.....	Apr. 2, 1878	61	16	13	607
199, 820	Fulgham, Jesse P., assignor to Hoosier Drill Company, Milton, Ind. Corn-drill.....	Jan. 29, 1878	1157	340	13	212
208, 588	Fulgham, Jesse P., Richmond, Ind. Seeding-machine.....	Oct. 1, 1878	135	39	14	507
207, 026	Fuller, Albert F., Providence, R. I. Blind-stop.....	Aug. 13, 1878	387	119	14	258
200, 651	Fuller, Alfred P., Rutland, Vt. Combined shoulder-brace and suspender.....	Feb. 26, 1878	800	235	13	379
200, 905	Fuller, Azariel Charles, Middletown, N. Y. Hat-pressing machine.....	Mar. 5, 1878	87	30	13	428
200, 906	Fuller, Azariel Charles, assignor to self and G. E. Fuller, Middletown, N. Y. Hat-folding device.....	Mar. 5, 1878	89	30	13	429
207, 511	Fuller, Benjamin F., Russell, Iowa. Vehicle-spring.....	Aug. 27, 1878	917	269	14	333
	Fuller, Charles A. (See Ballew & Fuller.)					
205, 627	Fuller, Charles B., assignor of one-half interest to Fred. A. McClure, Worcester, Mass. Hand-rubber.....	July 2, 1878	167	50	14	30
	Fuller, Charles H., <i>et al.</i> (See Morse, Charles A., assignor.)					
209, 902	Fuller, Charles H., Chicago, Ill. Coin-measure.....	Oct. 15, 1878	493	142	14	566
210, 248	Fuller, Frederick William Alfred, Louisville, Ky. Tobacco-press.....	Nov. 26, 1878	794	{ 235 } { 236 }	14	798
	Fuller, G. B. (See Fuller, Azariel Charles, assignor.)					
208, 230	Fuller, George H., Pawtucket, R. I. Manufacture of jewelers' findings.....	Sept. 24, 1878	715	210	14	452
198, 974	Fuller, Harvey Russell, Princeton, Mo. Beefsteak-tenderer.....	Jan. 8, 1878	260	70	13	57
207, 730	Same..... Harvester guard-finger.....	Sept. 3, 1878	150	45	14	368
8, 103	Fuller, Henry W., Brooklyn, N. Y., assignor, by mesne assignments, to Isaac W. Barnum. Mechanism for marking cloth in sewing-machines.....	Feb. 26, 1878	969	285	13	405
	Fuller, Isaac M., <i>et al.</i> (See Cosgrove, William N., assignor.)					
210, 316	Fuller, Jim Billings, Brooklyn, N. Y. Electric meters for measuring the current of electricity.....	Nov. 26, 1878	865	254	14	807
210, 317	Same..... Induction apparatus for lighting by electricity.....	Nov. 26, 1878	866	{ 254 } { 255 }	14	808
199, 429	Fuller, Levi K., assignor to J. Estey & Co., Battleborough, Vt. Reed-organ action.....	Jan. 22, 1878	739	217	13	139
238, 303	Fuller, Plimmon B., Union City, Pa. Shifting-rail for carriages.....	Sept. 24, 1878	796	231	14	462
	Fuller, Warren. (See Shephard, Thomas N., assignor.)					
201, 514	Fuller, William W. (See Rogers & Fuller.)					
	Fuller, Williston K., Modena, Ill. Stump-extractor.....	Mar. 19, 1878	724	220	13	535
	Fullerton, James S. (See Gestring & Fullerton.)					
202, 214	Fulmer, Thomas J., and Frederick Wiegman, De Graaf, Ohio. Shock-binder.....	Apr. 2, 1878	151	44	13	621
209, 243	Fulton, Abraham, Olney, Ill. Wheat-heater.....	Oct. 22, 1878	874	254	14	622
198, 737	Fulton, Samuel M., Pittsburg, Pa. Heating and feeding water for steam-boilers.....	Jan. 1, 1878	6	1	13	9
202, 535	Same..... Device for supplying feed-water to boilers.....	Apr. 16, 1878	732	212	13	708
207, 173	Furbush, James W., and John Perley, Lynn, Mass. Feeding device for button-hole sewing-machine.....	Aug. 20, 1878	546	164	14	281
203, 722	Furbush, Merrill A., Philadelphia, Pa., and Charles H. Knowlton, Camden, N. J., assignors to M. A. Furbush & Son, Philadelphia, Pa. Loom.....	May 14, 1878	522	148	13	898
	Furbush & Son. (See Furbush & Knowlton, assignors.)					
202, 015	Furey, Cyrus R., Logansport, Ind. Portable shower-bath.....	Apr. 2, 1878	152	44	13	621
208, 384	Same..... Shower-bath.....	Sept. 24, 1878	876	255	14	472
208, 385	Furse, Albert Donald, Rome, Italy. Asbestos packing.....	Sept. 24, 1878	876	255	14	472
206, 852	Furst, Charles J., and Charles Rudolph, Chicago, Ill. Construction of store-fronts.....	July 9, 1878	433	123	14	68



## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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205, 793	Gable, John H., Shamokin, Pa. Condenser for steam-engines.	July 9, 1878	373	107	14	59
205, 183	Gable, John W., assignor of one-half interest to E. F. Phillips, Tower City, Pa. Padlock	June 25, 1878	821	243	13	1133
199, 635	Gabler, Ernst, New York, N. Y. Piano-forte.	Jan. 29, 1878	981	285	13	185
210, 112	Gadbonis, Adolphus, Bourbonais, Ill. End-gate for wagons.	Nov. 19, 1878	636	189	14	773
202, 016	Gaertner, Adolph. (See Pattberg & Gaertner.) Gaff, James W., Cincinnati, Ohio. Reducing vegetable substances to prepare the same for saccharification	Apr. 2, 1878 Oct. 22, 1878	152 875	44 254	13 14	621 622
209, 244	Gaffron, William, Jefferson City, Mo. Apparatus for preserving beer in kegs.	Dec. 3, 1878	28	6	14	827
210, 415	Gage, Charles, Boston, Mass. Chuck.	Dec. 3, 1878	134	36	14	841
210, 516	Gage, Herbert R., et al. (See Williams, George W., assignor.) Gage, Hiram J., Kalamazoo, Mich. Wagon-bolster spring	June 11, 1878 July 9, 1878	247 434	77 123	13 14	1051 68
204, 663	Gainey, James, Augusta, Ga. Combined filtering, cooling, and water-forcing apparatus.	Feb. 12, 1878	393	116	13	302
205, 853	Galbraith, Henry, Cave, Ill. Gate	May 21, 1878	852	243	13	947
200, 275	Galbraith, Thomas, Londonderry, Ireland. Hot-bath apparatus.	Sept. 3, 1878	150	45, 46	14	368
204, 019	Gale, Alvin Theophilus, Piqua, Ohio. Ironing-table	June 11, 1878	404	118	13	1070
207, 731	Gale, Charles William, Osawatimie, Kan. Bee-hive	June 18, 1878	516	151	13	1087
204, 807	Gale, Dudley E., Salisbury, Mass. Carriage-door	Feb. 12, 1878	500	147	13	318
204, 891	Same. Carriage-seat	Jan. 29, 1878	982	285	13	185
8, 022	Gale, Horatio, assignor, by means assignments, to Gale Manufacturing Company, Albion, Mich. Plow	Mar. 5, 1878	46	16	13	422
199, 636	Gale, Horatio, Albion, Mich. Plow-wheel attachment	Nov. 19, 1878	542	162	14	760
200, 861	Gale, Horatio, assignor to Gale Manufacturing Company, Albion, Mich. Plow	Jan. 15, 1878	583	170	13	107
	Same. (See Gale, Horatio, assignor) (Reissue.)	Jan. 15, 1878	584	171	13	107
210, 021	Gallagher, Charles, Cairo, Ill. Millstone-curb and chop-conveyer.	Apr. 9, 1878	332	97	13	650
199, 281	Gall, Joseph. (See Lowne, Robert Mann, assignor.)	Oct. 22, 1878	876	254	14	622
199, 282	Gallagher, Anthony J. and Augustus B., Philadelphia, Pa. Rectifying apparatus	Oct. 22, 1878	876	254	14	622
	Same. (See Gallagher, Anthony J. and Augustus B.)					
202, 164	Gallagher, Joseph J., Davisville, Cal. Vehicle-gear.	Apr. 9, 1878	332	97	13	650
202, 245	Gallagher, Michael, Philadelphia, Pa. Pad for horses' feet.	Oct. 22, 1878	876	254	14	622
209, 246	Gallagher, Patrick, Eureka, Nev. Bench-plane	Oct. 22, 1878	876	254	14	622
	Gallaher, Daniel F., et al. (See Ball, Edward Moses, assignor.)					
210, 197	Gallaher, H. L. (See Childress, Patrick H., assignor.)					
	Gallaher, Philip M., Willet Lloyd, and George S. Walker, Danville, Pa. Blasting-powder	Nov. 26, 1878	742		14	791
203, 131	Gallahue, Alphens C., Morrisania, N. Y. Machine for making shoe-peg blanks	Apr. 30, 1878	1374	400	13	802
203, 028	Gallaspie, James, Ruessville, Ind. Trace-holder	Apr. 30, 1878	1277	369	13	789
	Galligan, Thomas. (See Sayers & Galligan.)					
205, 376	Gallinger, Joseph, New York, N. Y. Socket and stand for lamps	June 25, 1878	1027	304	13	1159
208, 677	Gallot, Julius, assignor to Maguire, Gallot & Co., New York, N. Y. Toy	Oct. 8, 1878	239	68	14	528
208, 014	Galloway, Thomas, and John Larsen, Oshawa, Ontario, Canada. Locking device for the teeth of seeders	Sept. 17, 1878	475	143	14	718
210, 683	Same. Combined broadcast-seeder, cultivator, and grain-drill	Dec. 10, 1878	329	90	14	875
208, 471	Galloway, William, Philadelphia, Pa. Porous evaporator	Oct. 1, 1878	18	5	14	491
202, 536	Gallup, Glen, Cleveland, Ohio. Wash-board	Apr. 16, 1878	734	212	13	708
203, 257	Gally, Merritt, New York, N. Y. Mechanical musical instrument	May 7, 1878	21	8	13	823
210, 249	Same. (See Gally, Merritt, New York, N. Y. Mechanical musical instrument)	Nov. 20, 1878	795	236	14	798
202, 342	Galster, Frank, Belew's Creek, Mo. Candle-holder	Apr. 16, 1878	531	155	13	682
206, 870	Garage, Walter L., Mount Pleasant, Iowa. Branding-stamp	Aug. 13, 1878	232	74	14	239
201, 515	Garnswell, John A., assignor of one-half interest to Martin Ittner, Saint Louis, Mo. Brick-machine	Mar. 19, 1878	725	220 221	13	535
204, 210	Garnsee, John, Chelsea, Great Britain. Apparatus for forming sheets of ice	May 28, 1878	1077	367	13	980
208, 304	Garnsee, John, Chelsea, England. Ice-machine	Sept. 24, 1878	796	232	14	462
208, 305	Same. (See Garnsee, John, Chelsea, Great Britain. Condenser for ice-machines.)	Sept. 24, 1878	797	232	14	462
208, 454	Garnsee, John, Chelsea, Great Britain. Condenser for ice-machines.	Sept. 24, 1878	953	279	14	482
203, 608	Garnpert, William, Keokuk, Iowa. Wood-sole shoe	May 14, 1878	404	115	13	884
203, 132	Gandy, Oliver S., Newport, N. J. Cultivator	Apr. 30, 1878	1377	400	13	802
203, 609	Gangwer, William, Mulberry, Ind. Harvester	May 14, 1878	405	115	13	884
205, 260	Gannett, Willard C., assignor of one-half interest to Minos Miller, Knoxville, Iowa. Car-coupling	June 25, 1878	900	266	13	1143
207, 653	Gannon, Lawrence E., Washington, D. C., assignor to John W. Hoyt and Caroline M. Dwight, Springfield, Mass. Securing roofing-slates	Sept. 3, 1878	71	21	14	358
204, 487	Ganong, Robert S., and William H. Langdon, Seneca Falls, N. Y. Chin-adjuster	June 4, 1878	65	22	13	1022
201, 237	Ganster, George P., Reading, Pa. Automatic device for raising and lowering illuminating-flames	Mar. 12, 1878	423	130	13	485
202, 537	Gard, Emory R. and Walter E., Croton Landing, N. Y. Brick-machine	Apr. 16, 1878	735	212 213	13	708
	Gard, Walter E. (See Gard, Emory R. and Walter E.)					
	Gardiner, Charles O. (See Mast & Gardiner.)					
200, 610	Gardiner, Heman, New York, N. Y. Car-spring	Feb. 26, 1878	756	222	13	373
	Gardiner, William H. (See Austin & Gardiner.)					
209, 037	Gardner, Addison E., Milan, assignor of one-half interest to Nathan C. Putnam, York, Mich. Oil-can	Oct. 18, 1878	641	185	14	585
206, 555	Gardner, Frederick A., Buffalo, N. Y. Steam-engine	July 30, 1878	1252	360	14	183
	Gardner, Frederick A. (See Grant, Sawyer & Gardner.)					
	Gardner, George W. (See Arndt, Daniel, assignor.)					
204, 808	Gardner, George, Westfield, N. J. Hot press for molding plates from veneer and other material	June 11, 1878	404	118	13	1070
	Gardner, James E. (See Houck & Gardner.)					
208, 589	Gardner, John, assignor to Winchester Repeating Arms Company, New Haven, Conn. Percussion-primer	Oct. 1, 1878	138	39	14	507
8, 337	Gardner, John W., Cleveland, and Thomas W. Ranson, Black River, Ohio. Coupling-valve for steam and air brakes	July 16, 1878	784	224	14	116
	Gardner, John Wickliffe. (See Affel, Michael, assignor.) (Reissue.)					
201, 663	Gardner, Joseph W., Shelburn Falls, Mass. Carving-fork	Mar. 26, 1878	892	272	13	562
201, 664	Same. (See Gardner, Joseph W., Shelburn Falls, Mass. Carving-fork)	Mar. 26, 1878	892	272	13	562
	Gardner, Nathaniel. (See Camp & Gardner.)					
202, 017	Gardner, William, New York, N. Y. Canister	Apr. 2, 1878	153	45	13	621
	Gardner, William E., et al. (See Condon, William F., assignor.)					
	Gardner, W. H., et al. (See Gingras, Timothy, assignor.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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203, 438	Garlioli, Anselmo André Marie, Paris, France. Organ-pipe.	May 7, 1878	215	61	13	840
205, 261	Garland, James G., assignor to Loom Picker Company, Biddeford, Me. Loom-picker.	June 25, 1878	901	207	13	1143
199, 532	Garlick, Wilnot Hall, Elliottsville, Ohio. Oil-lamp.	Jan. 22, 1878	849	248	13	156
198, 882	Garlington, Thomas C., La Fayette, Ala. Manure-grinder.	Jan. 1, 1878	165	47	13	34
205, 854	Same. .... Railway-gate.	July 9, 1878	434	124	14	68
	Garner, Monroe D. (See Covert, Garner & Walthall.)					
210, 020	Garnier, Jules, Paris, France. Working nickel ore and manufacture of nickel.	Nov. 19, 1878	540	.....	14	760
200, 387	Garoutte, William B., Greene County, Mo. Fire-escape.	Feb. 19, 1878	519	153	13	329
199, 537	Garrard, Jephtha, Cincinnati, Ohio, assignor to Excelsior Grain Binder Company (limited), New York, N. Y. Grain-binder.	Jan. 29, 1878	982	286	13	185
206, 102	Garrard, Jephtha, Cincinnati, Ohio. Harvester.	July 16, 1878	704	203	14	107
199, 197	Garretson, David G., Chicago, Ill. Stencil-plate.	Jan. 15, 1878	502	148	13	95
205, 184	Garretson, Oliver S., Buffalo, N. Y. Sash pulley-frame.	June 25, 1878	822	244	13	1133
	Garrett, Joseph. (See Ogden & Garrett.)					
207, 600	Garrett, Joseph E., Davenport, Iowa. Gate.	Sept. 3, 1878	16	0	14	351
205, 537	Garrison, Henry H., Pioche, Nev. Car-brake.	July 2, 1878	77	22	14	19
199, 283	Garrison, Lehman, Philadelphia, Pa. Brake for operating ships' windlasses.	Jan. 15, 1878	585	171	13	107
204, 021	Garrison, Sydney W., Memphis, Tenn. Rubber pocket-stamp.	May 21, 1878	853	244	13	947
208, 678	Gartman, David, York, Pa. Chopping or grinding mill.	Oct. 8, 1878	230	68	15	528
200, 276	Garver, Andrew A., Albion, Iowa. Fence-post.	Feb. 12, 1878	394	116	13	302
8, 142	Garver, David L., Hart, Mich. Harrow. (Reissue.)	Mar. 20, 1878	1106	334	13	592
199, 430	Same. .... Harrow-teeth.	Jan. 22, 1878	740	217	13	140
204, 020	Same. .... Hay-knife.	May 21, 1878	852	244	13	947
206, 780	Same. .... Seed-drill and cultivator.	Aug. 6, 1878	125	39	14	222
	Garvey, Thomas J. (See Schoonmaker, James W., assignor.)					
	Garvin, Frank J. (See Crowell, Solomon, assignor.)					
	Gary, Massena E. (See Roberts & Gary.)					
205, 628	Gassaway, John Henry, Grape Vine, Tex. Car-coupling.	July 2, 1878	168	50	14	31
204, 313	Gasser, Louis, assignor of one-half interest to Philipp Borger, Chicago, Ill. Car-coupling.	May 28, 1878	1177	335	13	992
210, 416	Gast, John, Brooklyn, N. Y. Applying designs, &c., to glass.	Dec. 3, 1878	80	.....	14	827
	Gatchel, Augustus C., et al. (See Beecher, William F., assignor.)					
209, 555	Gates, Abigail E., et al. (See Gates, Philetus W., assignor.)					
204, 809	Gates, Chesley, assignor of one-half interest to William King, Index, Mo. Fire-escape.	Nov. 5, 1878	19	6	14	683
209, 066	Gates, David, Benwood, W. Va. Drag-sawing machine.	June 11, 1878	405	119	13	1070
208, 231	Gates, Homer T., Hartford, Ohio. Door and gate pulley.	Nov. 19, 1878	480	145	14	752
202, 940	Gates, John, Portland, Oreg. Steam or hydraulic steering apparatus.	Sept. 24, 1878	716	{ 210 211 }	14	452
202, 940	Gates, Philetus W., assignor to self, Abigail E., Ryerson D., and Philetus W. Gates, Jr., Chicago, Ill. Ore-crusher.	Apr. 30, 1878	1189	343	13	778
202, 941	Same. .... same.	Apr. 30, 1878	1190	344	13	778
202, 808	Gates, Ryerson D., et al. (See Gates, Philetus W., assignor.)					
210, 113	Gates, Seldon T., assignor to Edward P. Knipe, Philadelphia, Pa. Manufacturer of heels for boots and shoes.	Apr. 23, 1878	1040	300	13	755
201, 234	Gates, Virgil A., Charlestown, W. Va. Cistern-filter.	Nov. 19, 1878	638	189	14	773
201, 235	Gath, Henry. (See Bersch, Josef, assignor.)					
201, 236	Gathmann, Louis, Chicago, Ill. Middlings-separator.	Mar. 12, 1878	419	129	13	485
198, 506	Same. .... same.	Mar. 12, 1878	420	129	13	485
8, 227	Same. .... Apparatus for preserving beer.	Mar. 12, 1878	422	130	13	485
202, 644	Gathright, John T., Louisville, Ky. Trace-carrier and back-band buckle.	Jan. 1, 1878	82	22	13	20
204, 892	Gathright, Josiah B., Louisville, Ky. Back-band hook. (Reissue.)	May 14, 1878	619	173	13	909
210, 417	Same. .... Buckle.	Apr. 23, 1878	870	249	13	734
	Same. .... Riding-saddle.	June 18, 1878	516	151	13	1087
	Same. .... Mail-bag fastener and tag-holder.	Dec. 3, 1878	30	6	14	827
209, 881	Gatts, M. Luther. (See Gatts, Silas W. and M. Luther.)					
202, 645	Gatts, Silas W. and M. Luther, Williams Township, Wood County, W. Va. Log-turner.	Nov. 12, 1878	377	113	14	735
199, 821	Gaughen, John M., Philadelphia, Pa. Horse-car bell.	Apr. 23, 1878	871	249	13	734
210, 942	Gay, Frank H., and Refine J. Follett, Corry, Pa. Fountain.	Jan. 29, 1878	1159	340	13	212
200, 757	Gay, George E., assignor of one-half interest to John A. Parsons, Augusta, Me. Ratchet screw-driver.	Dec. 17, 1878	628	174	14	922
	Gay, William A., Newark, N. J. Construction of cement vats for tanning and other purposes.	Nov. 12, 1878	250	74	14	719
208, 386	Gaylord, Charles D. (See Craine & Gaylord.)					
8, 393	Gaynor, Timothy J., Indianapolis, Ind. Animal-trap.	Sept. 24, 1878	877	255	14	472
202, 101	Gayton, William C., Chicago, Ill. Window-cleaner. (Reissue.)	Sept. 3, 1878	213	65	14	375
	Same. .... same.	Apr. 9, 1878	259	76	13	640
204, 554	Gear, Joel W. (See Bump & Gear.)					
204, 555	Gearing, Charles, assignor of one-half interest to Samuel Harper, Pittsburg, Pa. Process and apparatus for manufacturing illuminating-gas.	June 4, 1878	120	41	13	1030
204, 810	Same. .... same.	June 4, 1878	122	42	13	1030
202, 102	Geary, William, Fort Wayne, Ind. Pot-lid.	June 11, 1878	406	119	13	1070
200, 103	Geddes, William B., Rochester, N. Y. Stove and furnace grate.	Apr. 9, 1878	260	76	13	640
205, 629	Gederen, Carl E. S., Philadelphia, Pa. Button and stud.	July 16, 1878	706	204	14	107
207, 654	Gederen, Carl Erick Svenson, Philadelphia, Pa. Reefing and furling sails.	July 2, 1878	169	50, 51	14	31
199, 699	Geer, Don Carlos, Warren, Vt. Latch.	Sept. 3, 1878	73	22	14	358
	Geer, George F., Concord, assignor of one-half interest to George L. Damon, Boston, Mass. Lamp.	Jan. 29, 1878	1043	304	13	194
	Geer, Gilbert, jr. (See Barnum, Ashbell, assignor.)					
203, 723	Geer, W. E. (See Bishop, Orris A., assignor.)					
210, 932	Geer, William E., Chicago, Ill. Manufacture of oakum.	May 14, 1878	523	.....	13	898
210, 114	Geery, Samuel W., assignor of one-half interest to James Bowers, Newark, N. J. Galvanic corset.	Dec. 17, 1878	619	172	14	921
199, 052	Gefrörer, Charles, Philadelphia, Pa. Tinner's and roofer's gasoline-furnace.	Nov. 19, 1878	639	189	14	774
203, 007	Gebert, Albert Adolf, Quincy, Ill. Portable hay and cotton press.	Jan. 8, 1878	339	100	13	69
201, 176	Geier, Otto, Saint Albans, W. Va. Box-fastener.	May 21, 1878	730	208	13	932
198, 975	Geise, Henry, Philadelphia, Pa. Barber's chair.	Mar. 12, 1878	357	110	13	476
	Geiss, Hiram E., Florence, Ill. Grain-separator.	Jan. 8, 1878	266	76	13	57
206, 723	Gellbach, George F., et al. (See Eisenhardt, George F., assignor.)					
201, 238	Gelleland, John Henderson, Peck's Hill, Ala. Plow.	Aug. 6, 1878	66	22	14	215
	Gemmell, Thomas, Baltimore, Md. Heating-stove.	Mar. 12, 1878	426	{ 130 131 }	13	485
200, 440	Gema, Robert. (See Bourguignon, Wendel, assignor.)					
204, 211	Gemünder, Albert, Columbus, Ohio. Organ-pipe.	Feb. 19, 1878	579	171	13	838
	Gennert, Ernest Theodor, New York, N. Y. Drying-kiln.	May 28, 1878	1079	307	13	980

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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207, 960	Gentzsch, Henry J., sr., Chicago, Ill. Plow.....	Sept. 10, 1878	406	122	14	468
210, 198	Georg, Adolph, Chicago, Ill. Device for attaching seals to pipe-joints in distilleries...	Nov. 26, 1878	744	220	14	791
201, 404	George, Charles F., assignor of one-half interest to A. A. Judson, Fairfield, Iowa. Soldering-tweezer for jewelers.....	Mar. 19, 1878	620	189	13	519
205, 630	George, John S. (See George, Joseph A. and John S.)					
200, 708	George, Joseph, Springfield, Mo. Cultivator.....	July 2, 1878	170	51	14	31
	George, Joseph A. and John S., Bridgeport, Conn. Spring-scale for weighing.....	Feb. 26, 1878	862	258	13	368
204, 314	George, William F. (See Perkinson, David F., assignor.)					
	George, William F., New York, N. Y., assignor of one-half interest to Self-Acting Cow Milker Manufacturing Company. Apparatus for milking cows.....	May 28, 1878	1179	336	13	993
208, 387	George, William F., New York, N. Y. Stocking-supporter.....	Sept. 24, 1878	878	255	14	473
209, 118	Geppert, Albert, Spring Prairie, Wis. Wheel-cultivator.....	Oct. 22, 1878	750	218	14	005
205, 538	Gerard, Aristide, New Orleans, La. Thermoscope for fire-alarm indicators.....	July 2, 1878	79	22	14	19
205, 539	Same..... Electro auto-pneumatic water-indicator.....	July 2, 1878	80	22	14	19
205, 540	Same..... Switch for annunciator-alarms.....	July 2, 1878	81	23	14	19
	Gerard, Emilia. (See Lemenier & Gerard.)					
209, 247	Gerard, Frank, Lincoln, Ill. Vehicle-spring.....	Oct. 22, 1878	877	255	14	623
207, 601	Gerard, Frank C., Seymour, Conn., assignor of one-half interest to Frank H. Beecher. Leaf-holder for books.....	Sept. 3, 1878	17	6	14	851
209, 088	Gérard, John, assignor to Trenton Lock and Hardware Company, Trenton, N. J. Toy money-box.....	Oct. 15, 1878	042	186	14	585
211, 005	Same..... Sash-fastener.....	Dec. 17, 1878	701	193	14	930
8, 122	Gere, Theodore D., Owego, N. Y., assignor, by mesne assignments, to Archibald Putnam. Seeding-machine..... (Reissue)	Mar. 12, 1878	524	160	13	496
208, 388	Gere, Theodore D., Owego, N. Y. Grain-drill.....	Sept. 24, 1878	890	256	14	473
202, 809	Gerike, Hugo, Berlin, Prussia, Germany. Annealing glass and glassware.....	Apr. 23, 1878	1042		13	755
200, 907	Gerken, George H., New York, N. Y. Window.....	Mar. 5, 1878	89	31	13	429
	Gerlach, Andrew F. (See Woodbridge & Gerlach.)					
201, 106	Gerlach, James C. (See Griffin, John B., assignor.)					
109, 284	Gernert, Charles, assignor to Eliza Oakford, Philadelphia, Pa. Musical top.....	Mar. 12, 1878	289	89	13	406
204, 963	Gerroud, Henry, Cleveland, Ohio. Shield for commode-covers.....	Jan. 16, 1878	586	171	13	107
208, 973	Gerrud, Hugh, Chester, Ill. Boot and shoe lasting-apparatus.....	June 18, 1878	589	172	13	1097
201, 516	Gerry, Martin Hughes, Minneapolis, Minn. Metallic packing for piston-rods.....	Oct. 15, 1878	572	166	14	576
	Gersbach, Joshua. (See Chapin & Gersbacher.)					
201, 001	Gesley, Sabel, Beloit, Wis. Sulky-cultivator.....	Mar. 5, 1878	180	57	13	443
203, 133	Gessert, Charles Fremont, assignor of one-half interest to M. W. Oliver, Cincinnati, Ohio. Railway-switch.....	Apr. 30, 1878	1878	401	13	802
206, 718	Gessner, Ernst, Aue, Saxony. Machine for pressing cloth.....	Aug. 6, 1878	62	20	14	214
209, 907	Gesswein, Frederick W., Jersey City Heights, assignor of one-half interest to E. and W. Dixon, Newark, N. J. Brush.....	Nov. 19, 1878	481	145	14	752
202, 248	Geatring, Casper, and James S. Fullerton, Saint Louis, Mo. Vehicle-axle skein.....	Oct. 22, 1878	878	255	14	623
204, 664	Getzendanner, William H. (See Marquardt & Getzendanner.)					
199, 822	Getzendanner, William H., and J. Philip Marquardt, jr., Dayton, Ohio. Horse-collar.....	June 11, 1878	249	77	13	1051
204, 893	Geyser, John B., Allegheny, Pa. Broller.....	Jan. 29, 1878	1150	340	13	213
207, 266	Gibbons, Dennis E., Chicago, Ill. Fire-escape ladder.....	June 18, 1878	518	151	13	1088
199, 700	Gibbons, Robert Emmett, and David N. Ashmore, Bethany, Ill. Feather-renovator.....	Aug. 20, 1878	046	102	14	294
	Gibbs, Eugene Shepard, Lyons, Iowa. Tire-tightener.....	Jan. 29, 1878	1044	305	13	195
205, 855	Gibbs, George C. (See Knight, Curtis & Gibbs.)					
202, 249	Gibbs, Ivers, Worcester, Mass. Hose-elevator and fire-escape.....	July 9, 1878	435	124	14	68
205, 631	Gibbs, James E., Scottsborough, Ala. Reciprocating churn.....	Oct. 22, 1878	878	255	14	623
	Gibbs, Lewis, assignor to self, John R. Bucher, and William A. Wikidal, Canton, Ohio. Plow.....	July 2, 1878	171	51	14	31
207, 174	Gibbs, Lewis, Canton, Ohio. Plow.....	Aug. 20, 1878	548	164	14	282
204, 022	Gibson, Andrew P., assignor to Francis T. Wheeler and Lucius G. Fisher, jr., Chicago, Ill. Fruit-box.....	May 21, 1878	854	244	13	947
204, 028	Gibson, Andrew P., assignor of six-eighths interest to L. G. Fisher, jr., and Francis T. Wheeler, Chicago, Ill. Fruit-basket.....	May 21, 1878	856	245	13	948
208, 719	Gibson, Andrew P., assignor to Lucius G. Fisher, jr., and Francis T. Wheeler, Chicago, Ill. Fruit-box.....	Aug. 6, 1878	63	21	14	214
	Gibson, Arthur. (See Shaffer, William T., assignor.)					
203, 439	Gibson, Benjamin M., Monmouth, Ill. Shoe.....	May 7, 1878	216	61	13	850
202, 018	Gibson, Charles D. P., New York, N. Y. Gas-lighting.....	Apr. 2, 1878	154	45	13	621
208, 389	Same..... Insulated connection for gas-lighting apparatus.....	Sept. 24, 1878	881	256	14	473
	Gibson, Charles D. W. (See Lovett & Gibson.)					
205, 856	Gibson, Hiram. (See Lovins & Gibson.)					
	Gibson, Joseph H., assignor to Henry F. Miller, Boston, Mass. Shelf attachment for pianos and organs.....	July 9, 1878	437	124	14	68
202, 254	Gibson, Lloyd S., Jamestown, N. Y. Sash-fastener.....	Apr. 9, 1878	420	122	13	662
206, 871	Gibson, Richard F., and Richard P. McDaniel, Tuscaloosa County, Ala. Combined cotton scraper and chopper.....	Aug. 13, 1878	233	74	14	239
206, 720	Giddings, Ammi, Cleveland, Ohio. Triturating and reducing cylinders.....	Aug. 6, 1878	64	21	14	215
205, 632	Gidley, Robert, Moore's Mills, N. Y. Cattle-stanchion.....	July 2, 1878	173	52	14	31
203, 724	Gidlow, Thomas, Hollywood, and James Abbott, Ince, England. Puddling and balling furnace.....	May 14, 1878	524	148	13	896
208, 334	Gielstrup, Neils C., Bath, and Isaac A. Field, Phippsburg, Me. Vessel-boarding apparatus.....	May 7, 1878	102	30	18	834
208, 590	Giese, James Huling, Baltimore, Md. Box-opener.....	Oct. 1, 1878	137	40	14	507
8, 272	Giesecke, Hermann, Saint Louis, Mo. Horse-brush..... (Reissue)	June 4, 1878	225	72	13	1044
	Giesman, David. (See Armstrong & Giesman.)					
8, 392	Gifford, Charles, Gardiner, Me. Car-coupling..... (Reissue)	Sept. 3, 1878	212	65	14	375
204, 212	Same..... same.....	May 38, 1878	1080	307	13	980
203, 725	Gifford, Enoch T., and Samuel W. Pyle, Iowa Falls, Iowa. Steam boiler and heater.....	May 14, 1878	525	149	13	898
	Gifford, George G., et al. (See Vail, John E. and James B., assignors.)					
207, 655	Gifford, George S., Galesburg, Ill. Grain-binder.....	Sept. 3, 1878	73	22	14	358
206, 721	Gifford, John Summerfield, Fairfield, Me. Axle-nut wrench.....	Aug. 6, 1878	65	21	14	215
	Gignoux, Claude M. (See Collins & Thomas, assignors.)					
	Gilbaugh, John. (See McGraw & Gilbaugh.)					
203, 135	Gilberda, James, and Charles S. Jackson, Jamestown, N. Y.; said Jackson assignor to said Gilberda. Fastening for butter-tubs.....	Apr. 30, 1878	1380	401	13	863
204, 964	Gilbert, Arthur G. (See Gilbert, Newell H. and Arthur G.)					
201, 002	Gilbert, Cephas, Bucksville, assignor to self and Thomas W. Beaty, Conwayborough, S. C. Sheep-protector.....	June 18, 1878	590	172	13	1097
202, 251	Gilbert, George, assignor to William and H. Rowland, Philadelphia, Pa. Machine for finishing nail-rods.....	Mar. 5, 1878	181	58	13	443
	Gilbert, George A. and Henry J., Menomonee, Wis. Sleigh-knee.....	Oct. 22, 1878	881	256	14	623

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203, 184	Gilbert, George W., Kendallville, Ind. Churn-dasher.....	Apr. 30, 1873	1379	401	13	803
	Gilbert, Henry J. (See Gilbert, George A. and Henry J.)					
	Gilbert, James H. (See Johnson, John, assignor.)					
205, 954	Gilbert, John, assignor to James, Aikman & Co., Newark, N. J. Match-safe.....	July 26, 1873	557	159	14	88
209, 556	Gilbert, John, Newark, N. J. Sheet-metal box.....	Nov. 5, 1873	19	7	14	684
201, 405	Gilbert, John S., New York, N. Y. Valve for wash-basins.....	Mar. 19, 1873	621	189	13	519
199, 431	Gilbert, John W., assignor to Samuel S. White, Philadelphia, Pa. Hand-piece for dental engines.....	Jan. 22, 1873	741	218	13	140
210, 517	Gilbert, Newell H., and Arthur G. Fulton, assignors of one-third interest to Ransom B. True, Syracuse, N. Y. Manufacturing buckwheat-flour.....	Dec. 3, 1873	135		14	841
	Gilbert, Thomas S. (See De Forest & Gilbert)..... (Reissue.)					
202, 250	Gilchrist, Robert, Louisville, Ky. Fireman's ladder.....	Oct. 22, 1873	879	{ 255 256 }	14	623
198, 985	Gilchrist, William L., Franklin, N. H. Screw-driver.....	Jan. 8, 1873	226	64	13	50
202, 103	Gile, Albion K., Alfred, Me. Cranberry-gatherer.....	Apr. 9, 1873	262	76, 77	13	641
203, 538	Same..... Cranberry-rake.....	May 14, 1873	338	96	13	875
	Giles, Charles. (See McCarthy & Giles.)					
206, 453	Giles, Jordan, Louisville, Ky. Dumping-wagon.....	July 30, 1873	1124	322	14	167
206, 472	Giles, William W., Saint Louis, Mo. Drag-saw.....	Oct. 1, 1873	19	5	14	491
201, 772	Gillilan, Frederic C., Saint Petersburg, Pa. Low-water indicator and alarm.....	Mar. 26, 1873	1002	306	13	578
	Gill, Frank P. (See Farrar & Gill.)					
209, 903	Gill, Jabez H., Philadelphia, Pa. Machine for gaging cartridges.....	Oct. 15, 1873	493	{ 142 143 }	14	566
205, 633	Gill, John H., Rolla, Mo. Trunk.....	July 2, 1873	174	52	14	31
202, 252	Gill, William R., Meadville, Pa. Countersink.....	Oct. 22, 1873	881	256	14	623
208, 807	Gillard, Charlotte, San Francisco, Cal. Child's table-tray.....	Oct. 8, 1873	380	108	14	547
	Gilleland, Delos J. (See Morgan & Gilleland.)					
200, 652	Gillen, Mark P., Forrester, assignor of one-half interest to William J. Gillen, Galesburg, Ill. Combined baby jumper and carriage.....	Feb. 26, 1873	801	236	13	380
	Gillen, William J. (See Gillen, Mark P., assignor.)					
199, 302	Gillen, William S., assignor of part interest to James S. Negley, jr., and H. C. Campbell, Pittsburg, and D. B. Ashbaugh, Leechburg, Pa. Metallurgic gas-furnace.....	Jan. 22, 1873	677	198	13	129
199, 303	Gillen, William S., Pittsburg, assignor to David B. Ashbaugh, Leechburg, and H. C. Campbell, Pittsburg, Pa. Process and apparatus for preparing hydrocarbon gas from gas-wells.....	Jan. 22, 1873	678	199	13	130
207, 115	Gillespie, Cyrus E., Henry J., and Frederick J. Springer, Edwardsville, Ill. Thill-coupling.....	Aug. 20, 1873	491	147	14	274
199, 533	Gillespie, Harvey Morton, Pickwick, Pa. Device for raising and lowering tubes in oil-wells.....	Jan. 22, 1873	850	248	13	157
202, 343	Gillespie, Martin, assignor of one-half interest to A. J. McDonald, East Liverpool, Ohio. Invalid-bedstead.....	Apr. 16, 1873	531	155	13	682
	Gillespie, Richard Stephen. (See Worthen & Gillespie.)					
	Gillett, C. M. (See Gillett, Webster, assignor.)					
	Gillett, George W. (See Bricknal, Augustus Lea, assignor.)					
204, 024	Gillett, Webster, Ypsilanti, Mich. assignor of one-half interest to C. M. Gillett, Cleveland, Ohio. Speaking-telephone.....	May 21, 1873	857	245	13	946
203, 258	Gilliam, Algernon, Pittsburg, Pa. Saddle-loop.....	May 7, 1873	23	8	13	824
201, 239	Gillig, Otto, Brooklyn, N. Y. Trap for water-pipe.....	Mar. 12, 1873	427	131	13	485
203, 259	Gilligan, James Sylvester, Cincinnati, Ohio. Paint-brush.....	May 7, 1873	24	8	13	824
208, 232	Gilliland Lewis L., Dayton, Ohio. Meat-cutter.....	Sept. 24, 1873	718	211	14	453
208, 233	Same..... same.....	Sept. 24, 1873	719	211	14	453
	Gilliland, Samuel B. (See Fleming, Wayland & Gilliland.)					
200, 826	Gilliland, Theodore F., assignor of one-half interest to William Gutenkunst, Milwaukee, Wis. Fire-extinguisher.....	Mar. 5, 1873	11	4	13	417
201, 920	Gilliland, William T., Monmouth, Ill. Coffee-roaster.....	Apr. 2, 1873	62	16	13	607
207, 961	Gillin, Robert F., Brooklyn, assignor of one-half interest to William D. Currier, New York, N. Y. Faucet and cock.....	Sept. 10, 1873	407	123	14	404
204, 811	Gillis, Albert R., Salem, Ohio. Meat-cutter.....	June 11, 1873	407	119	13	1070
202, 715	Gillis, Constant, Brooklyn, N. Y. Child's carriage.....	Apr. 23, 1873	941	269	13	742
205, 837	Gillis, Walter R., Bowling Green, Ohio. Railway-rail joint.....	July 9, 1873	438	124	14	68
208, 335	Gilman, Edward L., Somerville, Mass. Printing-press.....	May 7, 1873	103	31	13	834
206, 722	Gilman, Nathaniel F., Rochester, Minn. Railway car truck.....	Aug. 6, 1873	66	21	14	215
198, 976	Gilman, Samuel Hilden, New Orleans, La. Bale-tie.....	Jan. 8, 1873	267	77	13	57
204, 965	Gilman, Samuel H., New Orleans, La. Bale-tie.....	June 18, 1873	590	172	13	1097
206, 311	Gilman, Walter S., Chicago, Ill. Nut-lock.....	July 23, 1873	907	275	14	144
205, 073	Gilmore, James, assignor to Leander S. Butterfield, Detroit, Mich. Curtain-fixturo.....	June 18, 1873	695	205	13	1111
	Gilmore, Jesse, et al. (See Trezise, Thomas, assignor.)					
203, 260	Gilmore, Vance C., Petrolia, Pa. Pump-rod attachments for deep wells.....	May 7, 1873	25	8	13	824
210, 933	Gilson, John, Fort Washington, Wis. Stove-drum.....	Dec. 17, 1873	619	172	14	921
204, 556	Gilzinger, Sebastian, assignor of one-half interest to Abel A. Crosby, Bondout, N. Y. Vehicle-spring.....	June 4, 1873	125	42	13	1030
206, 556	Gingras, Timothy, assignor of three-fourths interest to W. H. Gardner, George P. Putnam, and Bradford Taber, Buffalo, N. Y. Leather belting.....	July 30, 1873	1253	360	14	183
210, 848	Gingras, Timothy, assignor of one-half interest to Alfred Hall, Buffalo, N. Y. Leather washer.....	Dec. 17, 1873	510	144	14	908
209, 882	Giovannini, Philip, and Bruno Bennerseheid, San Francisco, Cal. Water-gate.....	Nov. 12, 1873	378	113	14	735
205, 186	Gipperich, Adolphus, Richmond, Va., assignor to Mulford & Bonnet, New York, N. Y. Ear-piercer.....	June 25, 1873	823	244	13	1133
210, 115	Gipperich, Adolphus, Richmond, Va. Sight for fire-arms.....	Nov. 19, 1873	640	190	14	774
	Gipson, John C. (See Griswold & Gipson.)					
200, 277	Gisel, John, Buffalo, N. Y. Street receiver and stench-trap.....	Feb. 12, 1873	395	117	13	302
201, 665	Gish, Christopher C., Salem, Kans. Motor.....	Mar. 26, 1873	893	272	13	562
199, 092	Gissinger, Samuel, assignor to E. W. Swentzel, Pittsburg, Pa. Level.....	Feb. 5, 1873	12	4	13	234
204, 812	Gladding, Richard S., Bristol, R. L. Screw-driver.....	June 11, 1873	408	119	13	1070
202, 104	Gladwell, John W., and Joseph R. White, Keys, N. C. Washing-machine.....	Apr. 9, 1873	263	77	13	641
202, 105	Gladwin, Porter A., Boston, Mass. Tool-handle.....	Apr. 9, 1873	264	78	13	641
204, 025	Glass, James T., Austin, Tex. Well-auger.....	May 21, 1873	858	245	13	948
	Glaze, Thomas. (See Starkey, William, assignor.)					
205, 074	Glaze, Thomas, and William Westwater, Pittsburg, Pa. Rerolling old rails.....	June 18, 1873	696	{ 205 206 }	13	1111
	Glazier, George M., et al. (See Parker, Lewis H., assignor.)					
202, 716	Glazier, George W., assignor of one-half interest to Thomas E. Smith and Benjamin Sorbner, jr., Lynn, Mass. Manufacture of logotypes.....	Apr. 23, 1873	942	269	13	742
200, 614	Glazier, George W., Salem, and Oscar E. Wait, Lynn, Mass. Machine for making bobbins.....	Nov. 5, 1873	82	24, 25	14	692

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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8, 345	Gleason, Alexander. ( <i>See</i> Drouillard, James P., assignor.) Gleason, E. P., et al. ( <i>See</i> Crawford, John, assignor.) Gleason, Elliott P. ( <i>See</i> Osgood, Enoch, assignor.) ..... (Reissue.) Gleason, Elliott P., Brooklyn, N. Y. Lamp-shade holder. .... (Reissue.) Gleason, George R. ( <i>See</i> Mather & Gleason.) Gleason, Lyman, et al. ( <i>See</i> Johnson, Alexander S., assignor.) Gleason, Robert E., assignor of one-half interest to A. Rodgers, Muskegon, Mich. Saw-mill appliance	July 23, 1878	1063	305	14	155
207, 267	Gleason, Robert E., assignor of one-half interest to A. Rodgers, Muskegon, Mich. Saw-mill appliance	Aug. 20, 1878	647	192	14	294
200, 653	Glenn, George K., and Henry Fern, Woodland, Cal. Cornice-mold and mitering device	Feb. 26, 1878	802	236	13	380
202, 253	Glenn, James D., Pleasantville, Pa., assignor to self and Edward A. L. Roberts. Device for removing paraffine from oil-wells	Oct. 22, 1878	882	237	14	623
206, 557	Glenn, John, Parnassus, Pa. Vehicle-spring	July 30, 1878	1254	361	14	183
200, 388	Glenn, John S., Chicago, Ill. Balanced rotary valve	Feb. 19, 1878	520	153	13	329
208, 808	Glenn, John S., assignor of one-half interest to George W. Hotchkiss and Robert Charles Lyons, Chicago, Ill. Stop valve	Oct. 8, 1878	381	108	14	547
203, 440	Glidden, Charles. ( <i>See</i> Shook & Glidden.) Glidden, Charles W., Lynn, Mass. Heeling-machine for boots and shoes	May 7, 1878	217	62	13	850
208, 106	Glidden, Edward H., Somerville, Mass. Office-indicator	Sept. 17, 1878	636	187	14	439
202, 538	Glidden, Joseph F., and Phineas W. Vaughan, De Kalb, Ill. Sulky-plow	Apr. 16, 1878	738	213	13	709
199, 823	Globe Mail Company. ( <i>See</i> Ellis, Charles, assignor.) Glorieux, William L., Newark, N. J. Metallurgic crucible	Jan. 29, 1878	1160	341	13	213
200, 654	Glotz, Joseph, et al. ( <i>See</i> Leggett, Edward W., assignor.) Glover, Almon B., Birmingham, assignor of one-half interest to David W. Plumb, } Huntington, Conn. Paper-bag machine	Feb. 26, 1878	803	236 337	13	380
206, 171	Glover, Carlos W., Danbury, Conn. Hat-block and spindle for hat pouncing and finishing machines	July 23, 1878	807	230	14	123
201, 240	Glover, Francis F., Reynolds, Ga. Cotton-chopper	Mar. 12, 1878	428	131	13	485
204, 813	Glover, John E., Lonoke County, Ark. Thrashing-machine	June 11, 1878	409	120	13	1070
210, 518	Glover, William W., Aurora, Ill. Belt-fastener	Dec. 3, 1878	136	36	14	841
206, 874	Glover, Wilson, assignor of one-half interest to John L. Sheppard, Charleston, N. C. Odorless closet	Aug. 13, 1878	239	75, 76	14	240
205, 541	Gluyas, Walter Releigh, Cerro Gordo, Ill. Balanced slide-valve	July 2, 1878	82	23	14	19
203, 261	Glynn, Lawrence, Cambridgeport, Mass. Pipe-wrench	May 7, 1878	26	9	13	824
202, 255	Gmchlin, Paul. ( <i>See</i> Hastings, A. Horace, assignor) ..... (Reissue.) Göbbels, Joseph, Saint John's, Ky. Target	Apr. 9, 1878	421	123	13	602
202, 433	Göbel, Georg, Darmstadt, Germany. Distance and velocity recorder	Apr. 16, 1878	619	181 182	13	694
199, 971	Gockley, Henry L., Joliet, Ill. Metal fence-post	Feb. 5, 1878	80	26	13	245
202, 163	Goddard, Alice M. ( <i>See</i> Goddard, George B., assignor.) Goddard, George B., assignor to Alice M. Goddard, Brockton, Mass. Mallet-handle Goddard Manufacturing Company. ( <i>See</i> Whipple, Charles S., assignor.)	Apr. 9, 1878	332	97	13	650
202, 717	Goddard, Nathan, Framingham, Mass. Clay-sifter	Apr. 23, 1878	943	270	13	742
206, 104	Goddard, O. M., et al. ( <i>See</i> Byrne, William, assignor.) Goddard, Willie F., Orwell, Ohio. Hay elevator and carrier	July 16, 1878	707	204	14	107
207, 116	Godding, Rachel, et al. ( <i>See</i> Murdock, Edwin R., assignor.) Godefroy, Pierre Eugene, Mobile, Ala. Eyeglass	Aug. 20, 1878	492	147	14	275
200, 278	Godey, William H. ( <i>See</i> Burrows, Henry, assignor.) Godfrey, Joseph L., Leslie, Mich. Tube-cleaner	Feb. 12, 1878	395	117	13	302
201, 241	Godfrey, Robert S., Camden, N. J. Ventilator or smoke-cowl	Mar. 12, 1878	428	131	13	486
208, 730	Godfrey, Walter John. ( <i>See</i> Davis & Godfrey.) Godillot, Alexis, Paris, France. Grate-bar for furnaces	Oct. 8, 1878	292	84	14	535
198, 843	Godley, George F., Philadelphia, Pa. Car-spring	Jan. 1, 1878	120	34	13	27
201, 517	Same. Draw-bar for railway-car	Mar. 19, 1878	728	222	13	535
209, 254	Same. Machine for coiling spiral springs	Oct. 22, 1878	883	237	14	624
209, 904	Same. Car-spring	Oct. 15, 1878	405	143	14	566
210, 318	Godwin, Joshua B., Washington, D. C. Domestic boiler	Nov. 26, 1878	867	255	14	808
201, 343	Godwin, Leroy C. ( <i>See</i> Neville & Godwin.) Goebel, Christian H., Philadelphia, Pa. Bedstead-fastening	Mar. 19, 1878	554	170	13	510
209, 338	Goebel, Christian H., Philadelphia, Pa., assignor, by mesne assignment, to United States Liquor Registering Company. Liquor measure and register	Oct. 20, 1878	980	285	14	640
200, 135	Goepel, Albert F. Herrn., Newark, N. J. Frame for satchels	Feb. 12, 1878	253	76	13	281
202, 256	Goff, Frederick, Chicago, Ill. Boot and shoe	Apr. 9, 1878	422	123	13	662
208, 306	Goff, George P., Washington, D. C. Buckle	Sept. 24, 1878	798	233	14	462
210, 775	Goge, Sigmond, New York, N. Y. Glove	Dec. 10, 1878	424	118	14	887
198, 766	Gold, Edward E., Brooklyn, N. Y. Tubular heater Gold Medal Sewing Machine Company. ( <i>See</i> Thomas, Eddy T., assignor.) Gold and Stock Telegraph Company. ( <i>See</i> Dolbear, Amos Emerson, assignor.) Golden, Simon. ( <i>See</i> Harrison, John D.) ..... (Reissue.) Golden, William Francis, Morris, Ind. Gate-latch	Jan. 1, 1878	45	12	13	15
201, 406	Golden, William Francis, Morris, Ind. Gate-latch	Mar. 19, 1878	622	189	13	519
200, 049	Golder, Moses D., Lewiston, Me. Wagon-hub	Feb. 5, 1878	159	51	13	258
199, 432	Goldie, George, Princeton, N. J. Rowing-machine	Jan. 22, 1878	742	218	13	140
209, 472	Goldie, William, Fenton, Mich. Shingle-cutting machine	Oct. 29, 1878	1116	326	14	660
200, 827	Golding, William H., Chelsea, Mass. Printing-press	Mar. 5, 1878	12	4, 5	13	417
206, 781	Same. Machine for cutting printers' rules and leads	Aug. 6, 1878	126	40	14	222
200, 136	Goldman, Isaac S., assignor of one-half interest to James K. Wysearver, Edinburg, Ill. Pushing-bar for railway-cars	Feb. 12, 1878	254	76	13	281
200, 050	Goldsack, Joseph, jr. ( <i>See</i> Bell & Goldsack.) Goldsmith, Martin M., New York, N. Y., George M. Cruickshank, Providence, and Stephen Brown, Greene, R. I., assignors to Goldsmith & Wheatley Manufacturing Company, New York, N. Y. Machine for cutting horn into sheets	Feb. 5, 1878	160	52	13	258
201, 107	Goldsmith, Rienza A., Washingtonville, N. Y. Thill-coupling	Mar. 12, 1878	290	90	13	466
201, 003	Goldsmith, Rosa H., Charleston, S. C. Bale-tie Goldsmith & Wheatley Manufacturing Company. ( <i>See</i> Goldsmith, Cruickshank & Brown, assignors.) Goldsworthy, John E. ( <i>See</i> Jewett, Jasper S., assignor) ..... (Reissue.) Same. ( <i>See</i> Nason & Wilson, assignors) ..... (Reissue.)	Mar. 5, 1878	182	58	13	443
200, 137	Goldthwait, Charles, South Weymouth, Mass. Slate-frame attachment	Feb. 12, 1878	255	77	13	281
8, 470	Golightly, Henry S., and Charles S. Twitchell, assignors to New Haven Folding Chair Company, New Haven, Conn. Folding chair ..... (Reissue.) Golucke, Edmund, assignor of one-half interest to Charles Bergstrom, Crawfordville, Ga. Horse-power	Oct. 29, 1878	1198	348	14	671
199, 053	Golucke, Edmund, assignor of one-half interest to Charles Bergstrom, Crawfordville, Ga. Horse-power	Jan. 8, 1878	341	100	13	69
207, 512	Same. Horse-power	Aug. 27, 1878	917	270	14	333
200, 188	Gomber, George W., Sybertsville, Pa. Fruit-jar	Feb. 12, 1878	307	91	13	288
202, 434	Gomber, George W., Hazleton, Pa. Bottle-stopper	Apr. 16, 1878	621	182	13	696

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
204, 894	Gonellaz, Hyacinthe, Vermillionville, La. Ditching-machine	June 18, 1878	519	152	13	1088
199, 638	Good, Adam, San Francisco, Cal. Umbrella-runner	Jan. 29, 1878	983	286	13	185
207, 732	Good, Edward G., assignor to Charles C. Holton, Chicago, Ill. Steam-generating and heating device for boilers	Sept. 3, 1878	152	40	14	368
206, 312	Good, Francis H., Joplin, Mo. Wash-boiler	July 23, 1878	968	275	14	144
205, 377	Goodall, Thomas, Sanford, Me. Machine for drying cloth	June 25, 1878	1028	304	13	1159
209, 805	Same. Nap or plush goods	Nov. 12, 1878	299	140	14	725
199, 903	Goodchild, William H., New York, N. Y., and Samuel F. Hay, Metuchen, N. J.; said Hay assignor to said Goodchild. Apple-paring machine	Feb. 5, 1878	13	4	13	235
200, 709	Goodchild, William H., New York, N. Y. Meat and vegetable cutter	Feb. 26, 1878	862	253 } 254 }	13	288
	Goode, W. H. C. (See Slusser, Benjamin, assignor.)					
	Goode, William H. C. (See Slusser, Benjamin, assignor.)					
200, 279	Goodell, David H., Antrim, and William Robb, Nelson, N. H. Apple-parer	Feb. 12, 1878	390	117	13	502
204, 557	Goodell, Dexter W., Northampton, assignor to Florence Machine Company, Florence, Mass. Oil-stove	June 4, 1878	126	42	13	1030
	Goodesham, William. (See Haggas, Joseph, assignor.)					
209, 557	Goodfellow, John H., assignor of one-half interest to Philip F. Miller, Troy, N. Y. Stove	Nov. 5, 1878	21	7	14	684
209, 558	Same	Nov. 5, 1878	22	7	14	684
206, 313	Goodfellow, Thomas G., Chicago, Ill. Hydrostatic lamp	July 23, 1878	969	275	14	144
204, 720	Goodheart, James, Matawan, N. J. Machine for distributing poison upon plants	June 11, 1878	307	95	13	1059
207, 268	Goodin, William I., Cincinnati, Ohio. Apparatus for preserving meat	Aug. 20, 1878	48	193	14	294
206, 394	Goodman, Eugene Franklin, Lockport, N. Y. Hammer	July 30, 1878	1082	309	14	162
	Goodnough, John M. (See Webster, Albert G., assignor.)					
	Goodnow, Daniel, jr. (See Fowler, Charles H., assignor.)					
199, 198	Goodrich, Augustus I., assignor to Waterbury Clock Company, Waterbury, Conn. Clock	Jan. 15, 1878	503	148	13	95
	Goodrich, Benjamin F. (See Work, Alanson, assignor.)					
	Goodrich, C. B., et al. (See Goodrich, Joseph, assignor.)					
	Goodrich, Charles H. (See Cox, Camillus, assignor.)					
200, 791	Goodrich, George D., Boston, Mass. Machine for enlarging the ends of clay tubular bodies and forming collars thereon	Feb. 26, 1878	938	276 } 277 }	13	400
204, 431	Goodrich, Harry C., Chicago, Ill. Sole for boots and shoes	June 4, 1878	17	6	13	1015
207, 602	Same. Boot and shoe sole	Sept. 3, 1878	18	6	14	352
201, 518	Goodrich, Herbert David, Fitchburg, Mass. Oiling wheel-axle	Mar. 19, 1878	729	222	13	535
8, 438	Goodrich, James, and Henry J. Colburn, Fitchburg, Mass., assignors to W. H. Doane, Cincinnati, Ohio. Planing-machine (Reissue)	Oct. 1, 1878	216	62	14	518
207, 027	Goodrich, John E., Sycamore, Ohio. Window-blind	Aug. 13, 1878	388	119	14	258
210, 684	Goodrich, Joseph, assignor of one-fourth interest to James B. Waller, Cook County, Ill. Nut and tap wrench	Dec. 10, 1878	330	90	14	875
210, 685	Goodrich, Joseph, assignor of part interest to James B. Waller and C. B. Goodrich, Henry, and William R. Goodrich, Kewanee, Ill. Endless-chain propeller	Dec. 10, 1878	331	90	14	875
207, 513	Goodrich, Nelson W. (See Flanders & Goodrich.)					
	Goodrich, Ransom R., and Jasper J. A. Parker, Dailey, Mich. Trace-carrier	Aug. 27, 1878	918	270	14	333
	Goodrich, William R., et al. (See Goodrich, Joseph, assignor.)					
	Goods, William H. (See McMurray & Goods.)					
	Goodson, Edward D. (See Woodward & Goodson.)					
203, 262	Goodspeed, Gurdon S., Providence, R. I. Wrench	May 7, 1878	26	9	13	824
202, 106	Goodwin, Asahel J., Brookline, Mass. Invalid-bedstead	Apr. 9, 1878	264	78	13	641
	Goodwin, Frank C. (See Bonnell, James A., assignor.)					
199, 054	Goodwin, George, Crookshire, Quebec, Canada. Tanning leather	Jan. 8, 1878	342	.....	13	69
203, 136	Goodwin, George E., assignor of one-half interest to James Pierce, Orange Township, Ionia County, Mich. Gate-hinge	Apr. 30, 1878	1381	401	13	803
206, 942	Goodwin, Hiland W., Ionia, assignor of one-half interest to William H. Hood, Ronald, Mich. Farm-gate	Aug. 13, 1878	307	94	14	248
204, 026	Goodwin, James, Montreal, Quebec, Canada. Invalid-bedstead	May 21, 1878	859	246	13	948
216, 519	Goodwin, Simeon A., Dayton, Ohio. Condenser for steam-engines	Dec. 3, 1878	138	36	14	841
210, 994	Goodwin, Simeon A., assignor of one-half interest to Jacob O. Joyce, Dayton, Ohio. Feed-water heater	Dec. 17, 1878	620	172	14	921
210, 022	Goodwin, Wallace, Detroit, Mich. Cigar-holder	Nov. 19, 1878	542	162	14	760
207, 028	Goodwin, William W., and Samuel W. Hulbert, Creston, Iowa. Corn-planter	Aug. 13, 1878	388	120	14	258
200, 862	Goodwyn, George W., assignor of two-thirds interest to J. C. Griffin and G. S. Bernard, Petersburg, Va. Nut-lock	Mar. 5, 1878	47	16	13	422
203, 137	Goodwyn, George W., assignor of one-fourth interest to Henry A. Taylor, Petersburg, Va. Coffee-pot	Apr. 30, 1878	1381	402	13	803
8, 318	Goodyear, Albert, 2d, Hamden, Conn. Grain-binder (Reissue)	July 2, 1878	280	82, 83	14	44
209, 758	Goodyear, Andrew, Albion, Mich. Plow	Nov. 12, 1878	251	75	14	719
	Goodyear, Charles, jr. (See Dancel, Christian, assignor.)					
205, 794	Goodyear, Robert B., Philadelphia, assignor of one-half interest to Wolfenden, Shore & Co., Cardington, Pa. Shuttle-box motion for looms	July 9, 1878	374	108	14	60
207, 413	Goodyear, Watson A., San Francisco, Cal. Process and apparatus for manufacturing water-gas	Aug. 27, 1878	809	240	14	320
200, 710	Gorby, John Richmond, Hiramburg, Ohio. Combined collar and hame	Feb. 26, 1878	865	254	13	389
204, 558	Gordner, Henry S., Rosedale, N. C. Shingle	June 4, 1878	126	43	13	1030
203, 139	Gordon, Albert A., assignor to George Crompton, Worcester, Mass. Loom-picker	Apr. 30, 1878	1383	402	13	803
201, 407	Gordon, Edward F., assignor to J. A. White, Concord, N. H. Clamp	Mar. 19, 1878	622	190	13	519
205, 480	Gordon, Edwin, Hyde Park, and John A. Dugan, Quincy, Mass. Railway-switch	July 2, 1878	17	6	14	11
200, 863	Gordon, Fred, Chicago, Ill. Running-gear for wagons	Mar. 5, 1878	48	17	13	422
198, 977	Gordon, Jacob, assignor to Redlich & Schnitzler, New York, N. Y. Cigarette	Jan. 8, 1878	267	77	13	57
	Gordon, James. (See Walton, George, assignor.)					
210, 319	Gordon, James F., Rochester, N. Y. Grain-binder	Nov. 26, 1878	867	256	14	808
210, 520	Same	Dec. 3, 1878	139	36	14	841
200, 280	Gordon, James Harvey, assignor of one-half interest to Norman I. Peters, Keota, Iowa. Harness-saddle tree	Feb. 12, 1878	397	118	13	302
203, 138	Gordon, John Henri, Brooks, Me. Shoe-blackening	Apr. 30, 1878	1383	.....	13	803
203, 610	Gordon, Samuel J., assignor of one-half interest to Theron Seymour, Winterest, Iowa. Laundry apparatus	May 14, 1878	406	115 } 116 }	13	884
8, 397	Gore, Henry A., Goshen, and George W. Edgecomb, Lima, assignors, by mesne assignments, to Goshen Sweeper Company, Goshen, Ind. Carpet-sweeper (Reissue)	Sept. 3, 1878	217	66, 67	14	376
200, 527	Gorenflo, Edward, Jersey City Heights, N. J. Paging-machine	Feb. 19, 1878	654	192 } 193 }	13	340
201, 344	Gorges, Edouard, Paris, France. Powder for curing meat	Mar. 19, 1878	555	.....	13	510
201, 004	Gorman, John E., Washington, D. C. Bill-file	Mar. 5, 1878	183	58	13	443
208, 809	Gorman, John J., Philadelphia, Pa. Sewer-inlet valve	Oct. 8, 1878	382	108	14	547



## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
204, 315	Gornall, Richard, assignor to Thomas Tausley, jr., Baltimore, Md. Machine for soldering square cans.	May 28, 1878	1180	336	13	993
200, 051	Gorr, Solomon, Allentown, Pa. Wagon-brake.	Feb. 5, 1878	161	52	13	258
208, 083	Gorrell, John B., La Otto, Ind. Spring-seat for wagons.	Sept. 17, 1878	542	162	14	427
199, 534	Gorsline, Joshua T., Parma, N. Y. Apparatus for handling hides.	Jan. 22, 1878	850	248	13	157
205, 262	Gorton, Charles, Salem, Ohio. Feed-cooker.	June 26, 1878	901	267	13	1143
211, 006	Gorton, Orson S., North Brookfield, N. Y. Wagon-gear.	Dec. 17, 1878	702	193	14	930
210, 849	Goshen Sweeper Company. (See Gore & Edgcomb, assignors.) (Reissue.)					
208, 167	Goss, Edward K., Chicago, Ill. Dust-pan.	Dec. 17, 1878	510	144	14	908
198, 997	Gothard, Ira, Bainbridge, Ky. Fruit-picker.	Sept. 17, 1878	637	187	14	439
205, 634	Gott, Laura Jane, La Grange, Ohio. Car-coupling pin.	Jan. 8, 1878	228	64	13	51
	Gouge, Henry A., assignor to Samuel Shethar, New York, and Edward A. Nichols, Yonkers, N. Y. Ventilated grain-car.	July 2, 1878	175	52	14	31
	Gough, S. C., et al. (See Holton, John Charles, assignor.)					
	Gough, W. C., et al. (See Holton, John Charles, assignor.)					
207, 723	Gould, Arthur C. (See Brush & Hartnett, assignor.)					
202, 718	Gould, Fayette, Huntington, N. Y. Rowlock.	Sept. 3, 1878	153	46	14	368
210, 521	Gould, Frank J., Sidney, Ohio. Heating-stove.	Apr. 23, 1878	943	270	13	742
	Gould, Simeon L., Gardiner, Me. Pulp-screen for paper machinery.	Dec. 3, 1878	141	37	14	842
	Gould, Solon S. (See Parker, Joseph Newell, assignor.)					
	Gould, W. V. (See Covert, Frank M., assignor.)					
	Gould, William B. (See Rivers, Thomas L., assignor.) (Reissue.)					
	Same. (See Stearns, Charles E., assignor.)					
206, 873	Goupitel, Elmer, Cleveland, Ohio. Machine for ruling paper.	Aug. 13, 1878	237	75	14	240
202, 539	Gove, Edward. (See Rhind, Frank, assignor.)					
200, 281	Gower, Frederick A., Providence, R. I., and Mason J. Matthews, Boston, Mass. Electro-harmonic telegraph.	Apr. 16, 1878	739	214	13	709
	Grable, Earhart Lucian, Manor Station, Pa. Spring-pillow.	Feb. 12, 1878	398	118	13	302
	Gracier, Frank J. (See Edwards & Gracier.)					
201, 519	Grady, George W., et al. (See Burgess, Warren S., assignor.)					
200, 528	Graether, Theodore, Rochester, N. Y. Sled.	Mar. 19, 1878	730	223	13	535
	Graetzel, Henry F., Gardenville, Md. Reed-organ.	Feb. 19, 1878	656	193	13	350
203, 140	Graf, Carl. (See Hedges, Moller & Graf.)					
205, 542	Graf, Leopold, Newark, N. J. Dye-stuff or coloring matter.	Apr. 30, 1878	1384		13	803
210, 418	Same. Shoe.	July 2, 1878	83	23	14	19
	Graff, John M., Brooklyn, N. Y. Hot-air furnace.	Dec. 3, 1878	31	7	14	828
201, 408	Graff, Joseph. (See Keeler, Edward L., assignor.)					
205, 186	Grafflin, George W., jr., Baltimore, Md. Sash-holder.	Mar. 19, 1878	623	190	13	520
	Grafton, William S., assignor of one-half interest to Alexander Hanvey, Steubenville, Ohio. Sheet-metal roofing.	June 25, 1878	824	244	13	1133
209, 615	Graham, Archibald, administrator. (See Graham, William A.)					
210, 320	Graham, Archibald, Fancy Hill, Va. Apparatus for making vinegar and aging liquor.	Nov. 5, 1878	85	25	14	692
199, 701	Graham, Miles G., Cobleskill, N. Y. Fruit-can.	Nov. 26, 1878	872	257	14	808
203, 029	Graham, Muckersie G., Monmouth, Ill. Cultivator.	Jan. 29, 1878	1045	305	13	195
	Graham, Robert J. S., Brooklyn, assignor to self and Miles J. Connor, New York, N. Y. Buckle.	Apr. 30, 1878	1277	369	13	789
201, 409	Graham, Thomas T. (See Coonley & Graham.)					
201, 520	Graham, Walter, and J. A. Dennison, Amisquam, Mass. Lewis.	Mar. 19, 1878	623	190	13	520
205, 942	Graham, William, Utah County, and Emery Ward, Salt Lake County, Utah. Blasting-powder.	Mar. 19, 1878	730		13	536
	Graham, William A. (Archibald Graham, administrator), Lexington, Va. Method of, and apparatus for extinguishing fires.	July 9, 1878	529	151	14	80
206, 012	Graham, William H. (See Hutchinson & Graham.)					
200, 189	Granbery, Theodore, New York, N. Y. Locket.	July 16, 1878	616	177	14	96
199, 535	Grange, Frederick C., Baltimore, Md. Fertilizer.	Feb. 12, 1878	307		13	289
	Granger, Susan De Lamater, Ann Arbor, Mich. Sewing-machine chair.	Jan. 22, 1878	852	249	13	157
190, 151	Grannis, John C., trustee. (See Stockwell, Levi W., assignor.)					
204, 316	Grant, Belville A., Joliet, Ill. Grain-separator.	Jan. 15, 1878	458	135	13	87
	Grant, Horace Ellison, Pittsburg, Pa. Machine for bending links.	May 28, 1878	1182	336	13	993
	Grant, J. J., et al. (See Johnson, Alexander S., assignor.)					
204, 028	Grant, James A. (See McClelland & Grant.)					
	Grant, John J., Nelson Sawyer, and Frederick N. Gardner, assignors to Pratt & Whitney Company, Hartford, Conn. Screw-cutting die.	May 21, 1878	862	246	13	948
204, 561	Grant, Jott. (See Houghton, Edward C., assignor.)					
208, 084	Grant, Jott, and Albert G. Cook, Boston, Mass. Tree-protectors.	June 4, 1878	130	44	13	1031
198, 444	Grant, Kenneth Peter, San Buenaventura, Cal. Weeder.	Sept. 17, 1878	543	162	14	427
	Grant, Royal C., Middleport, Ohio. Rotary cut-nail machine.	Jan. 1, 1878	121	35	13	27
209, 883	Grantham, John. (See Sample, Grantham, Ward & Waddle.)					
200, 908	Graser, Theodor, Oswego, N. Y. Manufacture of wagon-axles.	Nov. 12, 1878	379	113	14	736
201, 773	Gratiot, Edward Hempstead, Platteville, Wis. Drier for grain and middlings.	Mar. 5, 1878	90	31	13	429
200, 190	Gravatt, Thomas E., Port Royal, Va. Barber's comb.	Mar. 26, 1878	1003	306	13	578
210, 419	Graves, Edward K., Waltham, Mass. Fire-escape.	Feb. 12, 1878	308	92	13	289
199, 972	Graves, Henry L., Rockaway, N. J. Trundling-hoop.	Dec. 3, 1878	32	7	14	828
8, 113	Graves, Jefferson Monroe, Blossom Prairie, Tex. Cultivator.	Feb. 5, 1878	81	26	13	245
206, 434	Graves, John, New York, N. Y. Can for transporting liquids. (Reissue.)	Mar. 5, 1878	262	82	13	454
208, 810	Graves, Lorenzo S., Rochester, N. Y. Ratcheted guide for elevators.	July 30, 1878	1125	322	14	167
204, 721	Graves, William H., Syracuse, N. Y. Spring-gun.	Oct. 8, 1878	383	109	14	547
203, 263	Gravit, William, Elkhart, Ind. Signaling apparatus.	June 11, 1878	308	9	13	1059
	Grawe, Herman C., Saint Louis, Mo. Pendulum adjustment for clocks.	May 7, 1878	27	9	13	824
206, 782	Gray, A. H. (See Crowell, Ellen C., assignor.)					
	Gray, Adelbert W., Cardington, Ohio. District and alarm telegraph.	Aug. 6, 1878	128	40, 41	14	222
198, 738	Gray, Benjamin A. (See Rose, Joseph F., assignor.)					
203, 264	Gray, Elisha, Chicago, Ill. Morse telephonic telegraphy.	Jan. 1, 1878	7	2	13	10
204, 027	Same. Circuit for speaking telephones.	May 7, 1878	28	9	13	824
204, 029	Same. Speaking-telephone.	May 21, 1878	860	246	13	948
204, 550	Same. same.	May 21, 1878	863	246	13	948
204, 560	Same. same.	June 4, 1878	127	43	13	1031
205, 378	Same. same.	June 4, 1878	128	43	13	1031
207, 269	Same. Transmitting rhythmical vibrations in an electric circuit.	June 25, 1878	1028	304	13	1159
210, 776	Same. Speaking-telephone.	Aug. 20, 1878	649	193	14	294
202, 019	Same. same.	Dec. 10, 1878	424	118	14	888
199, 055	Gray, George E., San Francisco, Cal. Spiral spring.	Apr. 2, 1878	156	45	13	621
	Gray, George L., Philadelphia, Pa. Feed-regulator for carbureters.	Jan. 8, 1878	343	100	13	69
	Gray, H. Mott, trustee, et al. (See Otis, Newton S., assignor.) (Reissue.)					

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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202, 020	Gray, Henry W., Philadelphia, Pa. Piano-string .....	Apr. 2, 1878	157	46	13	622
	Gray, James. (See Hailes & Gray.)					
	Gray, John D. (See Thomas, David H., assignor.)					
203, 539	Gray, John W., Hartford, Conn. Hose-nozzle .....	May 14, 1878	338	96	13	875
210, 023	Gray, Joshua W., Ghent, N. Y. Water-wheel .....	Nov. 19, 1878	543	162	14	761
200, 711	Gray, Kennedy, Chicago, Ill. Traveling printing apparatus .....	Feb. 26, 1878	865	254	13	389
202, 719	Gray, Leonardia W. P., and Thomas S. Johnson, New Orleans, La. Bale-tie .....	Apr. 23, 1878	945	270	13	742
200, 655	Gray, Richard, Bloomington, Ill., assignor to Thomas J. Gray, Goodland, Ind. Gate .....	Feb. 26, 1878	807	237	13	380
202, 021	Gray, Richard, assignor to self, Jefferson Dunn, and James B. Sargent, Bloomington, Ill. Railway-switch .....	Apr. 2, 1878	157	46	13	622
	Gray, Thomas J. (See Gray, Richard, assignor.)					
210, 420	Gray, William H., Tama City, Iowa. Grafting implement .....	Dec. 3, 1878	82	7	14	828
	Gray, William S., et al. (See Otis, Newton S., assignor.) .....					(Reissue.)
	Gray, William T. (See Woodbury & Gray.)					
203, 611	Graydon, James W., Washington, D. C. Car-heating apparatus .....	May 14, 1878	407	116	13	884
209, 166	Same..... Heating railway-car .....	Oct. 22, 1878	802	232	14	612
210, 321	Grayson, William, assignor to Saint Louis Refrigerator and Wooden Gutter Company, Saint Louis, Mo. Refrigerator .....	Nov. 26, 1878	878	257	14	808
8, 472	Greely, Benjamin J., Boston, Mass. Supporter for stockings and other garments. (Reissue) .....	Oct. 29, 1878	1199	348	14	671
206, 013	Same..... Suspender .....	July 16, 1878	617	177	14	96
209, 559	Same..... Suspender-ends .....	Nov. 5, 1878	23	7	14	684
190, 904	Green, Asabel, Aurora, Iowa. Tool for stretching fence-wires .....	Feb. 5, 1878	14	4	13	235
203, 265	Green, Charles C., Worcester, Mass. Buffing-wheel for finishing boots and shoes .....	May 7, 1878	80	10	13	824
204, 030	Green, Charles E., Newark, N. J. Wire-coiling machine .....	May 21, 1878	864	247	13	949
208, 085	Green, Charles E. and Robert, Notting Hill, England. Breech-loading fire-arm .....	Sept. 17, 1878	544	162	14	427
8, 126	Green, Charles, and William Wilson, jr., Wilmington, Del. Metallic can. (Reissue) .....	Mar. 19, 1878	806	245	13	545
201, 066	Same..... same .....	Mar. 26, 1878	894	272	13	563
207, 175	Green, Cyrel W., and Marshall T. Howland, Rutland, Vt. Potato-digger .....	Aug. 20, 1878	549	165	14	282
	Green, George W., et al. (See Smith, Seth H., assignor.)					
201, 410	Green, Henry, assignor to self and Stephen H. James, Chilton, Wis. Mud-pipe cleaner .....	Mar. 19, 1878	624	190	13	520
208, 473	Green, Henry M., Camden, N. J. Combined table and life-preserver .....	Oct. 1, 1878	20	6	14	491
205, 795	Green, John W., Pontiac, Mich., assignor of one-half interest to Ben. M. Plumb and James H. Mandeville, Washington, D. C. Ruler .....	July 9, 1878	375	108	14	60
	Green, John Walker. (See Greene, Peter Hunt, assignor.)					
	Green, M. (See Hanson, Francis, assignor.)					
201, 521	Green, Oliver C., Dublin, assignor to Hoosier Drill Company, Milton, Ind. Corn-planter .....	Mar. 19, 1878	731	223	13	536
210, 935	Green, Peter Hunt, assignor to John Walker Green, Hespeler, Ontario, Canada. Pump .....	Dec. 17, 1878	621	172	14	921
190, 824	Green, Samuel, Aurora, N. Y. Chair-bottom .....	Jan. 29, 1878	1160	341	13	213
	Green, William H. (See Morgan, Thomas, assignor.)					
207, 864	Green, William Martin, Wartrace, Tenn. Medical compound .....	Sept. 10, 1878	800		14	390
208, 066	Green, Willard Reed, Muscatine, Iowa. Brake for railway-cars .....	Sept. 17, 1878	545	163	14	427
	Green, William W. (See Dewees & Green.)					
	Green, William W., jr. (See Terry & Green.)					
	Greene, Charles S. (See Blackman, Harlan F., assignor.)					
	Same..... (See Naulty, John F., assignor.)					
	Greene, Charles S., et al. (See Hand & Caulier, assignors.)					
206, 496	Greene, Daniel B., administrator. (See Wilcox, Joseph S.) .....					(Reissue.)
210, 250	Greene, Jonathan H., Philadelphia, Pa. Roofing-paper .....	July 30, 1878	1127	323	14	167
	Greene, John N., assignor of two-thirds interest to William H. Tucker and Robert S. Dorsey, Indianapolis, Ind. Street-sign .....	Nov. 26, 1878	797	236	14	708
190, 199	Greene, Welcome A., Lincoln, R. I. Fire-escape .....	Jan. 15, 1878	504	143	13	96
209, 806	Greene, William A., Elizabethport, N. J. Cooking-stove .....	Nov. 12, 1878	299	89, 90	14	725
203, 612	Greene, William H. S., and Andrew Sturtevant, Summit Station, N. Y. Chair .....	May 14, 1878	407	116	13	884
204, 723	Greenebaum, Berthold, San Francisco, Cal. Pocket for garments .....	June 11, 1878	812	96	13	1059
	Greener, Andrew. (See Felch, Allen S., assignor.)					
211, 007	Greener, George W., Long Point, Ill. Sulky-plow .....	Dec. 17, 1878	703	194	14	990
	Greenfield, George J., et al. (See Crizer, Matyas, assignor.)					
190, 702	Greenhalgh, John H., Uxbridge, Mass. Stop-motion for warping-machine .....	Jan. 29, 1878	1047	305	13	195
206, 437	Greenidge, Rupert, New York, assignor to George B. Cluett, Brother & Co., Troy, N. Y. Collar .....	July 30, 1878	1128	323	14	167
	Greenleaf, Abner. (See Boyer, William H., assignor.) .....					(Reissue.)
204, 722	Greenleaf, Clements A., Indianapolis, Ind. Turn-table .....	June 11, 1878	810	95	13	1050
206, 307	Greenleaf, Miller T., and George Q. Adams, Quincy, Ill. Car-coupling .....	Sept. 24, 1878	709	233	14	462
207, 176	Greenleaf, Thoro F., Westborough, Mass. Flour-dressing machine .....	Aug. 20, 1878	551	165	14	282
	Greenlee, Ralph S. (See Greenlee, Robert L. and Ralph S.)					
190, 285	Greenlee, Robert L. and Ralph S., Chicago, Ill. Mortising and boring machine .....	Jan. 15, 1878	586	171	13	107
203, 336	Greenman, Arthur, Lockport, N. Y. Device for trapping the apple-worm .....	May 7, 1878	104	31	13	834
203, 441	Greenman, Thomas S., Mystic Bridge, Conn. Paper-cutting machine .....	May 7, 1878	220	62	13	850
201, 108	Greenough, John J., Syracuse, N. Y. Hinge for awning-blinds .....	Mar. 12, 1878	291	90	13	466
190, 056	Greenwood, John, Rochester, N. Y. Machine for making hoops .....	Jan. 8, 1878	344	100	13	69
190, 057	Same..... Machine for making staves .....	Jan. 8, 1878	345	101	13	70
190, 058	Same..... Barrel-hoop machine .....	Jan. 8, 1878	346	101	13	70
200, 052	Greenwood, John T., jr., assignor of one-half interest to J. R. Nye, Beloit, Wis. Washing-machine .....	Feb. 5, 1878	162	52	13	258
190, 639	Greenwood, Thomas J., Warren, Ill. Low shoe .....	Jan. 20, 1878	984	286	13	185
200, 282	Same..... Balmoral shoe .....	Feb. 12, 1878	398	118	13	302
203, 030	Same..... Shoe .....	Apr. 30, 1878	1278	370	13	789
8, 505	Greenwood, William M., and John N. Clarke, Cincinnati, Ohio. Roll for rolling horse-shoe blanks. (Reissue) .....	Nov. 26, 1878	959	279	14	819
8, 506	Same..... Horse-shoe blank bar .....	Nov. 26, 1878	960	279	14	819
209, 884	Greget, Louis, assignor to self and Christian L. Hines, Brooklyn, N. Y. Toy pistol .....	Nov. 12, 1878	380	113	14	736
206, 435	Grogg, Abraham, Forest City, Cal. Automatic water-lifter .....	July 30, 1878	1126	322	14	197
208, 234	Grogg, Washington Parker, Boston, Mass. Roller-skate .....	Sept. 24, 1878	720	212	14	453
208, 235	Same..... same .....	Sept. 24, 1878	721	212	14	453
209, 039	Gregg, William, Mason, Mich. Stone and log sled .....	Oct. 15, 1878	643	186	14	586
	Gregory, Charles W. (See Morris & Gregory.) .....					(Reissue.)
206, 314	Greig, John, Morris, Ill. Gate .....	July 23, 1878	970	276	14	144
207, 029	Greiss, Adam, Philadelphia, Pa. Knitting-machine cylinder .....	Aug. 13, 1878	389	120	14	258
206, 172	Grether, Jacob, Friburg, Baden, Germany. Hose-coupling .....	July 23, 1878	808	231	14	123

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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8, 460	Gridley, James E., Chicago, Ill. Heating-stove..... (Reissue)...	Oct. 29, 1878	1197	347	14	671
200, 712	Grier, William W., Hulton, Pa. Fifth-wheel for carriages.....	Feb. 26, 1878	867	254	13	389
200, 713	Griffin, Alonzo, assignor of one-half interest to E. Merritt, Meshoppen, Pa. Frame for photographs.....	Feb. 26, 1878	868	255	13	389
8, 523	Griffin, Caleb H., Boston, Mass., assignor of one-half interest to Elizabeth E. Dugin. Dressmaker's square..... (Reissue)...	Dec. 17, 1878	704	218	14	941
206, 315	Griffin, Caleb H., Boston, assignor, by mesne assignments, to Elizabeth E. Dugin, Malden, Mass. Drafting-square for garments.....	July 23, 1878	971	276	14	144
208, 300	Griffin, George D., Hamilton, Ontario, Canada. Carriage-spring.....	Sept. 24, 1878	882	257	14	473
210, 421	Griffin, George W., assignor to self and Parker C. Hancock, Franklin, N. H. Scroll-saw.....	Dec. 3, 1878	33	7	14	828
210, 686	Griffin, Henry Evans, Olympia, Wash. Hinge.....	Dec. 10, 1878	332	91	14	875
206, 670	Griffin, Henry H., Gardner, assignor to Thompson, Perley & Waite, Baldwinsville, Mass. Nursery-chair.....	Aug. 6, 1878	12	4	14	208
8, 342	Griffin, Ira M., Maryville, Mo. Subsoil-plow..... (Reissue)...	July 23, 1878	1061	304	14	154
200, 807	Griffin, J. C., et al. (See Goodwyn, George W., assignor.)	Nov. 12, 1878	301	90	14	725
200, 101	Griffin, James, Mendocino, Cal. Saw-guide.....	Feb. 12, 1878	308	92	13	289
203, 442	Griffin, John B., assignor to self and James C. Gerlach, Boston, Mass. Bottle-stopper fastening.....	May 7, 1878	222	63	13	850
203, 443	Griffin, Robert S., Worcester, Mass. Bench-plane.....	Aug. 13, 1878	308	94	14	248
206, 945	Griffin, Seth, Elyria, Ohio. Land-leveler.....	June 18, 1878	592	206	13	1097
204, 900	Griffin, Sumner W., Chelsea, Mass. Process for curing fish.....	June 18, 1878	597	206	13	1111
205, 075	Griffin, Thomas J., Brooklyn, assignor to Clarence Brooks & Co., New York, N. Y. Oil-can Griffing, David T. (See Blackman & Griffing.)	Oct. 29, 1878	962	285	14	640
209, 239	Griffith, John R., et al. (See Odendahl, William D., assignor.)	Mar. 12, 1878	292	90	13	406
209, 239	Griffith, Joseph G., New York, N. Y. Machine for pressing seams.....	July 9, 1878	313	92	14	52
201, 101	Griffith, Levi B. and Nathan B., Philadelphia, Pa. Curtain-tassel.....	Feb. 12, 1878	499	147	13	318
201, 749	Griffith, Nathan B. (See Griffith, Levi B. and Nathan B.)	Nov. 5, 1878	24	8	14	684
205, 141	Griffith, Owen, Marshall, Mich. Water-wheel.....	May 28, 1878	1183	336	13	903
8, 081	Griffith, Samuel, and John S. Patterson, Cincinnati, Ohio, assignor of one-third interest to Lafayette Devenny. Draft apparatus for railway-cars..... (Reissue)...	Jan. 15, 1878	505	148	13	95
200, 560	Griffith, Smith A., Green Township, Hamilton County, Ohio. Plaster.....	June 4, 1878	65	22, 23	13	1022
204, 317	Griffiths, John E. (See Sanford, William H., assignor.)	Jan. 8, 1878	268	77	13	57
204, 317	Griffiths, Morris W., Middle Granville, N. Y. Tire-upsetter.....	Dec. 17, 1878	704	194	14	931
205, 543	Griffiths, William J. (See Broughton, John, assignor.)	Apr. 30, 1878	1384	402	13	803
202, 942	Grigg, Thomas H., West Meriden, Conn., assignor to George G. Stillman, Westerly, R. I. Compass.....	Apr. 16, 1878	622	182	13	605
202, 942	Griggs, George H., Hartford, Conn. Pipe-coupling.....	Nov. 5, 1878	153	44, 45	14	701
200, 673	Grigor, Robert. (See Cooke, Daniel E., assignor.)	Oct. 8, 1878	298	84	14	535
204, 213	Grillenberger, John M., assignor, by mesne assignment, to Rosina Grillenberger, Syracuse, N. Y. Pump..... (See Grillenberger, John M., assignor.)	Feb. 10, 1878	521	154	13	329
190, 200	Grilley, Charles T., Boston, Mass. Loom-picker.....	May 14, 1878	526	149	13	898
204, 488	Grimes, Francis M. (See Porter & Grimes.)	Mar. 12, 1878	429	132	13	486
198, 978	Grimes, George Washington, Bluffton, Ind. Combined drill and planter.....	Apr. 23, 1878	1044	300	13	755
211, 008	Grimm, Paul, Glen Cove, N. Y. Governor for steam-engines.....	Sept. 3, 1878	154	46	14	368
203, 141	Grimm, Paul, Ward I. Fancher, and Hamilton K. Roberts, Glen Cove, N. Y. Electric alarm for steam-boilers.....	Jan. 8, 1878	227	64	13	50
202, 435	Grimme, Hermann J., Cincinnati, Ohio. Sofa-bedstead.....	July 23, 1878	972	276	14	144
202, 443	Grimshaw, William D., New York, N. Y. Hydraulic power-accumulator.....	June 18, 1878	598	207	13	1111
200, 674	Same..... Machine for printing and cutting fabrics.....	Aug. 20, 1878	552	165	14	282
208, 731	Gringmuth, Herman, Dresden, Saxony. Case for toilet articles, &c.....	Sept. 3, 1878	154	47	14	368
200, 389	Grinnon, Robert Lewis, Lancaster, Ky. Postmarking and stamp-canceling machine.....	Mar. 12, 1878	358	111	13	476
203, 720	Grinnell, Charles W., and Frank Bulckens, Waverly, Iowa. Vehicle-top adjuster.....	Sept. 17, 1878	636	187	14	439
201, 242	Grinnell, Frederick, Providence, R. I. Sprinkling-pipe.....	Jan. 8, 1878	347	101	13	70
202, 810	Grinnell, Vrooman B., Waverly, Iowa. Wagon-top.....	Mar. 12, 1878	293	90	13	466
207, 734	Grinnell, Vrooman B., and Frank Bulckens, Waverly, Iowa. Carriage-top.....	Apr. 16, 1878	623	182	13	685
198, 936	Grinson, Edward, Stalybridge, England. Ore-crusher.....	Oct. 22, 1878	751	218	14	605
206, 316	Griscom, Walter, Pottsville, Pa., and Thomas McFeely, Union City, Ind. Millstone-dressing machine.....	June 11, 1878	313	96	13	1059
205, 076	Griscom, William M., Reading, Pa. Sash-lock.....	Apr. 2, 1878	21	.....	13	601
207, 270	Griscom, William W., Philadelphia, Pa. Galvanic battery.....	Aug. 20, 1878	552	165	14	282
207, 735	Grisell, Hiram L., Pennville, Ind., assignor to self and Lewis Grisell. Scale-beam.....	Sept. 3, 1878	154	47	14	368
201, 177	Grisell, Lewis. (See Grisell, Hiram L., assignor.)	Mar. 12, 1878	358	111	13	476
208, 168	Griswold, Catharine A., New York, N. Y. Garment-supporter.....	Sept. 17, 1878	636	187	14	439
199, 050	Griswold, Charles L., Chester, Conn., assignor of one-half interest to Henry McTighe, New York, N. Y. Bit-stock.....	Jan. 8, 1878	347	101	13	70
199, 050	Griswold, Gardner B., and John C. Gipson, Felt's Mills, N. Y. Feather-renovator.....	Mar. 12, 1878	293	90	13	466
201, 110	Griswold, John, Fandon, Ill. Evaporating-pan.....	Apr. 16, 1878	623	182	13	685
202, 436	Griswold, Lewis Albion, Marshallfield, Ohio. Curry-comb.....	Oct. 22, 1878	751	218	14	605
209, 119	Grittinger, Henry C., Cornwall, Pa. Flushing slag or cinder from blast-furnaces.....	June 11, 1878	313	96	13	1059
204, 724	Gritzner, Max, Durlach, Baden. Sewing-machine table.....	Apr. 2, 1878	21	.....	13	601
201, 878	Grivel, Emile, Paris, France, assignor to Albert L. Du Puget, Hoboken, N. J. Compressed food.....	Aug. 20, 1878	552	165	14	282
207, 177	Groat, Peter B., et al. (See Chadwick, Charles, assignor.)	Apr. 30, 1878	1385	402	13	803
203, 142	Gröbe, Carl, Berlin, Prussia, assignor to Friedrich Lürmann, Osnabruck, Germany. Metallurgic gas-furnace.....	Apr. 30, 1878	1385	403	13	803
203, 142	Gröbli, Isaac W. (See Rieter, Wehrli & Gröbli.)	Apr. 30, 1878	1385	404	13	804
203, 143	Gröbli, Isaac, Wülflingen, Henry Rieter, jr., Winterthur, and John Wehrli, Wülflingen, Switzerland, assignors to F. A. and A. E. Kurscheidt, New York, N. Y. Embroidering-machine.....	Apr. 30, 1878	1385	405	13	804
205, 544	Grodhaus, George C. (See Grodhaus, George W. and George C.)	July 22, 1878	84	24	14	19
202, 646	Grodhaus, George W. and George C., Bellaire, Ohio. Machine for crozing and chamfering staves.....	Apr. 23, 1878	871	250	13	724
210, 199	Groes, Andrew, New York, N. Y. Smoke-consuming furnace.....	Nov. 26, 1878	744	220	14	791
206, 233	Grondona, Giacomo, San Francisco, Cal. Macaroni-machine.....	July 23, 1878	874	249	14	132
	Gronoweg, Henry R. (See Turner, Josiah S., assignor.)					
	Grocock, Samuel P., New York, N. Y. Clamp for gluing parquetry.....					

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206, 317	Gros, Hermann C., Reutlingen, Württemberg, Germany. Boot and shoe sewing machine	July 23, 1878	973	{ 277 278 }	{ 14 14 }	{ 144 799 }
210, 251	Grosclaude, Louis A., Geneva, Switzerland. Pawl and ratchet.	Nov. 26, 1878	798	236	14	799
202, 540	Grosjean, Florian, assignor to Lalance & Grosjean Manufacturing Company, New York, N. Y. Handle for sheet-metal vessels or utensils.	Apr. 16, 1878	742	214	13	709
202, 541	Same..... same	Apr. 16, 1878	743	214	13	709
204, 318	Same..... Sealing-cover for bowls of wash-stands, water-closets, &c.	May 28, 1878	1184	337	13	993
204, 319	Same..... Handle for sheet-metal vessels	May 28, 1878	1185	337	13	993
204, 814	Gross, Henry, Cincinnati, Ohio. Burglar-proof safe	June 11, 1878	409	120	13	1070
209, 561	Same..... Time-lock	Nov. 5, 1878	25	8	14	684
	Gross, John. (See Mueller & Gross.)					
206, 724	Gross, Magnus, New York, N. Y. Apparatus and process for making illuminating gas.	Aug. 6, 1878	67	22	14	215
	Gross, Rudolph. (See Wessell, Nickel & Gross.)					
	Gross, Samuel E. (See McMurray & Gross.)					
	Grosscup, F. P., et al. (See Moltrip, James C., assignor.)					
204, 146	Grossheim, Georg, Elberfeld, assignor to Adolph Siebert, Hummersbach, Prussia, Germany. Marbleizing paper and other fabrics.	May 28, 1878	1005	286	13	970
	Grossman, M. J. (See Krapp, John, assignor.)					
202, 720	Grotevent, Frederick Jacob, Reading, Pa. Mailing-package	Apr. 23, 1878	945	270	13	742
200, 714	Groth, Henry, assignor to self and Philip Klee, New York, N. Y. Toy carriage	Feb. 26, 1878	869	255	13	389
210, 252	Grout, John R., Detroit, Mich. Metal-testing machine.	Nov. 26, 1878	798	237	14	790
	Grout, W. L. (See Harlow, Charles F., assignor.) (Reissue.)					
202, 022	Grove, George W., Linnville, Ohio. Permutation-padlock	Apr. 2, 1878	159	46	13	622
	Grove, W. H. (See Dealy, William H., assignor.)					
208, 236	Grover, Demas L., and Arad S. Beach, assignors of one-half interest to Hiland K. Clark and Dexter H. Marsh, Groton, N. Y. Harvester cutter and guard-finger	Sept. 24, 1878	722	212	14	453
209, 675	Grover, Demas L., Groton, N. Y. Harvester guard-finger	Nov. 5, 1878	155	45	14	701
209, 433	Grover, Henry Martin, Vinton, Iowa. Car-coupling	Jan. 22, 1878	744	218	13	140
204, 432	Grover, Oliver F., Middletown, Conn., assignor of one-half interest to William Quail, Brooklyn, N. Y. Printer's composing-stick	June 4, 1878	17	6	13	1015
203, 908	Groves, Henry, Indianapolis Ind. Saw-mill carriage	May 21, 1878	730	209	13	932
	Grow, Frank H. (See McGinnis & Mans, assignors.)					
203, 613	Grubb, William H., Hannibal, Mo. Barrel-top show-case	May 14, 1878	408	116	13	884
201, 005	Grube, Lavina, Liberty Mills, Ind. Clamp for attaching mop-heads and wringers to pails	Mar. 5, 1878	183	59	13	443
202, 023	Grubs, John, assignor of one-fourth interest to Luke Eisenman, Lickingville, Pa. Oil-drill bit.	Apr. 2, 1878	160	46	13	622
199, 152	Gruunon, Robert S., Newark, N. J. Pole-crab for vehicles	Jan. 15, 1878	458	135	13	87
204, 031	Grunter, William T., Tivoli, N. Y. Track-clearer	May 21, 1878	865	247	13	949
	Guade, R. G. (See Lozier, Abraham W., assignor.)					
199, 286	Gue, Albert, Fred, and George Franklin Field, Boston, Mass. Car-brake	Jan. 15, 1878	587	172	13	107
208, 169	Gue, Benjamin, New Baltimore, Mich. Churn	Sept. 17, 1878	639	188	14	439
	Guen, Robert. (See Guen, Charles E. and Robert.)					
	Guernsey, Jane M. (See Guernsey, William B., assignor.)					
208, 308	Guernsey, William B., assignor to Jane M. Guernsey, Norwich, N. Y. Horse-collar and hame	Sept. 24, 1878	801	{ 233 234 }	{ 14 14 }	{ 462 462 }
	Guest, Edmond. (See Hernelright, Henry, assignor.)					
207, 514	Gnux, Louis, Paris, France. Knife-cleaning apparatus	Aug. 27, 1878	919	270	14	333
200, 053	Guild, Augustus, and Frederick B. Clark, Middletown, Conn. Steam-engine lubricator	Feb. 5, 1878	163	53	13	259
200, 715	Same..... Counter-shaft with reverse motion	Feb. 26, 1878	869	255	13	389
	Guild, Chester. (See Townsend, Louis, assignor.) (Reissue.)					
198, 883	Guild, William H., Brooklyn, N. Y. Injection-condenser	Jan. 1, 1878	166	47	13	34
206, 558	Guild, William H., jr., Brooklyn, N. Y. Valve action of duplex engines and pumps	July 30, 1878	1255	361	14	183
8, 386	Guilder, Absalom R., Minneapolis, Minn. Middlings-purifier	Aug. 20, 1878	725	216	14	305
	Guiley, Henry F. (See Guiley, Jacob H. and Henry F.)					
210, 522	Guiley, Jacob H., and Henry F., East Saginaw, Mich. Cutter-head	Dec. 3, 1878	143	37	14	842
202, 811	Guinn, Andrew J., Jackson, Tenn. Hog-cholera compound	Apr. 23, 1878	1044	297	13	755
208, 974	Gulden, Wolfgang, Minneapolis Township, Hennepin County, Minn. Sign	Oct. 15, 1878	573	167	14	576
210, 457	Gumbs, Edward, Jersey City, N. J. Hand-stamp	Dec. 3, 1878	71	18	14	833
210, 024	Gummer, Albert, Omro, Wis. Clothes-pounder	Nov. 19, 1878	544	163	14	761
204, 815	Gumpert, Gustav E., Philadelphia, Pa. Cigar-tuck protector	June 11, 1878	411	120	13	1071
	Gundelfinger, Andrew. (See Gundelfinger, Daniel, jr., and Andrew.)					
205, 077	Gundelfinger, Daniel, jr., and Andrew, Jefferson City, Mo. Knife-sharpener	June 18, 1878	699	207	13	1111
206, 014	Gunderson, Carl G., Worcester, Mass. Flat-iron	July 16, 1878	617	178	14	96
198, 914	Gundlach, Ernst, assignor of one-half interest to John J. Bausch, Rochester, and Henry Lomb, Brooklyn, N. Y. Object-glass for microscopes	Jan. 1, 1878	198	56	13	39
203, 614	Gunkel, Engelhardt, Chicago, Ill. Prepared meat	May 14, 1878	408	116	13	884
	Gunn, Daniel, et al. (See Dooley, Thomas Brown, assignor.)					
204, 725	Gunning, Thomas B., New York, N. Y. Ejector for oil-wells	June 11, 1878	314	96	13	1060
	Gunnison, Frank. (See Halleck & Blood, assignors.)					
	Günther, Gottlob. (See Alverson, Andrew H., assignor.) (Reissue.)					
204, 562	Günther, Gottlob, New York, N. Y. Feed and water cup for bird-cages	June 4, 1878	131	44	13	1031
207, 804	Gunter, John L., Newark, N. J. Shelf-support	Sept. 10, 1878	234	74	14	382
203, 144	Gurley, Henry B., De Kalb, Ill. Garbage-truck	Apr. 30, 1878	1390	406	13	804
	Gurley, L. E., et al. (See Gurley, William, assignor.)					
	Gurley, Lewis E. (See Gurley, William and Lewis E.)					
205, 379	Gurley, Royal, Meadville, Pa. Railway-switch bar	June 25, 1878	1030	305	13	1159
205, 481	Gurley, William, assignor to W. & L. E. Gurley, Troy, N. Y. Tripod for surveying-instruments	July 2, 1878	18	6	14	11
	Same..... Tripod-head for surveying-instruments	Oct. 8, 1878	294	85	14	536
209, 255	Same..... same	Oct. 22, 1878	884	257	14	624
209, 562	Same..... same	Nov. 5, 1878	28	8, 9	14	684
205, 742	Gurley, William and Lewis E., Troy, N. Y. Telescope attachment for surveyors' compasses	July 9, 1878	314	92	14	52
204, 214	Gurney, George, Taunton, Mass. Winding-on mechanism for spinning-mules	May 28, 1878	1081	308	13	980
	Gurney, Thomas. (See Moffitt, John A., assignor.)					
	Guseman, William D. (See Davis, Guseman, and McGeorge.)					
199, 536	Gutenberger, Wilhelm, Sacramento, Cal. Land-roller and clod-crusher	Jan. 22, 1878	853	249	13	157
	Gutenkunst, William. (See Gilliland, Theodore F., assignor.)					
	Gutmann, Max, et al. (See Scharfberg, Mendal, assignor.)					
199, 060	Gutmann, Max L., Rochester, N. Y. Portable hand-punch	Jan. 8, 1878	348	101	13	70
210, 025	Gutman, Seligman, assignor to Lewis Schiele & Co., New York, N. Y. Corset	Nov. 19, 1878	544	162	14	761
209, 473	Guttermann, G. Adam, Belleville, Ill. Grain-lifter for harvesters	Oct. 29, 1878	1117	326	14	660
205, 167	Gutzkow, Frederick, San Francisco, Cal. Process of refining retorted amalgam	June 25, 1878	824	249	13	1133

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			Spec.	Dr. g.	Vol.	Page.
210, 116	Guy, Constant Alexia, Paris, France. Plate-printing machine.	Nov. 19, 1878	641	190	14	774
207, 030	Guy, Warren A. and William S., Nottoway Court-house, Va. Tobacco-hoisting apparatus.	Aug. 13, 1878	390	120	14	258
207, 062	Guy, William S. (See Guy, Warren A. and William S.)					
	Guy, William S., Nottoway Court-house, Va. Baggage-check.	Sept. 10, 1878	408	123	14	404
206, 559	Guyer, Asbury W. (See Guyer, Caleb and Asbury W.)					
204, 032	Guyer, Caleb, Tyrone, Pa. Churn.	July 30, 1878	1257	362	14	184
205, 078	Guyer, Caleb, and Asbury W., Tyrone, Pa. Washing-machine.	May 21, 1878	886	247	13	940
206, 438	Guyer, Richard H., La Fayette, Ind. Vehicle-seat-spring fastening.	June 18, 1878	699	207	13	1112
206, 318	Same. Vehicle-spring.	July 30, 1878	1128	823	14	167
206, 318	Gwynnell, John M., Newark, N. J. Harness-saddle.	July 23, 1878	980	279	14	145
209, 968	Same. Gig-saddle tree.	Nov. 19, 1878	481	145	14	752
207, 885	Gyles, James F., Chicago, Ill. Car-stove and apparatus for extinguishing fire thereon.	Sept. 10, 1878	300	91, 92	14	390
201, 667	Haarmann, Hermann August, Osnabruck, Prussia. Railway-track.	Mar. 26, 1878	895	273	13	562
207, 515	Haas, Charles T., Philadelphia, Pa. Liquid-filter.	Aug. 27, 1878	920	270	14	533
	Haas, Christian. (See Ellithorpe & Haas.)					
199, 640	Haas, Jerome, and James Manning, Stockton, Cal. Well-boring machine.	Jan. 29, 1878	985	280	13	185
202, 542	Haas, Joseph, Delaware, Ohio. Brick-kiln.	Apr. 16, 1878	744	215	13	709
199, 287	Haas, Louis F., Fond du Lac, Wis. Harrow.	Jan. 15, 1878	589	172	13	107
200, 390	Haas, Simon, assignor to C. Dognin & Co., Lyons, France. Machine-treadle.	Feb. 19, 1878	522	154	13	829
203, 031	Haas, William, Walla Walla, Wash. Washing-machine.	Apr. 30, 1878	1270	870	13	789
204, 215	Same. Mop-wringer.	May 28, 1878	1082	308	13	960
200, 283	Haasz, Daniel F., Philadelphia, Pa. Chair-bottom.	Feb. 12, 1878	899	118	13	302
202, 543	Habernicht, August, New York, N. Y. Apparatus for dispensing effervescent liquids.	Apr. 10, 1878	745	215	13	711
204, 816	Hack, Friedrich, Hamburg, Germany. Apparatus for the manufacture of peat-bricks.	June 11, 1878	412	121	13	1071
205, 380	Hackley, John, assignor of one-half interest to James P. Howard, Fall River, Mass. Spinning-mule.	June 25, 1878	1031	305	13	1100
203, 727	Hackelberg, Amelie, New York, N. Y. Packing case or box for bottles.	May 14, 1878	526	140	13	808
210, 026	Hacker, David Fox, assignor to self, Vincent C. and Elisha Booth, Kempton, Ind. Horse hay-rake.	Nov. 19, 1878	545	103	14	761
210, 523	Hackett, George, Birmingham, England. Attaching the fore-end stock to gun-barrels.	Dec. 3, 1878	141	28	14	842
209, 256	Hackett, Joseph, Louisville, Ky. Molding-machine.	Oct. 22, 1878	885	257	14	624
208, 679	Hadaway, William S., Chiltonville, Mass. Waxing device for sewing-machines.	Oct. 8, 1878	240	68	14	528
199, 973	Hadfield, Robert, Sheffield, England. Projectile for heavy guns.	Feb. 5, 1878	82	27	13	246
199, 434	Hadger, Phineas S. (See Bray, Walter, jr., assignor.)					
201, 774	Hadley, Amos K., assignor to self and William F. C. McCarty, New York, N. Y. Car-brake.	Jan. 22, 1878	744	218	13	140
209, 257	Hadley, George W., assignor to Massachusetts Arms Company, Chicopee, Mass. Cap-extractor.	Mar. 26, 1878	1004	306	13	579
209, 257	Hadley, Hiram W., and Jehiel M. Dean, Lodi, N. Y. Gate.	Oct. 22, 1878	886	258	14	604
203, 443	Hadley, Oscar S., et al. (See Richey, Gaspar T., assignor.)					
200, 054	Haedicke, Paul, Berlin, Prussia. Lamp.	May 7, 1878	222	63	13	850
200, 054	Haehnel, Frederic, assignor to Mayer Brothers & Haehnel, New Orleans, La. Cigar-machine.	Feb. 5, 1878	164	53	13	259
200, 055	Same. Cigar-wrapper cutter.	Feb. 5, 1878	166	53	13	259
208, 906	Haehnlen, Lewis, sr. (See Haehnlen, Theodore D., assignor.)					
	Haehnlen, Theodore D., assignor of one-fifth interest to Lewis Haehnlen, sr., Philadelphia, Pa. Ticket-reel.	Oct. 15, 1878	498	143	14	567
200, 716	Hafely, Frederick E. (See Young & Hafely.)					
198, 739	Hagaman, Joseph Dwight, Weston, Mich. Gate.	Feb. 26, 1878	870	255	13	339
205, 633	Hagan, Daniel A., Hoosick Falls, N. Y. Whiffletree-hook.	Jan. 1, 1878	9	2	13	10
	Hagedorn, Dora. (See Ziegler, G. Frederick, assignor.)					
202, 812	Hageman, Randolph Foster, New Madison, Ohio. Lifting-jack.	July 2, 1878	176	53	14	32
	Hagen, Augustus A. (See Crossley, Hagen & Juenga.)					
	Hagenbaugh, James M. (See Van Orman & Hagenbaugh.)					
	Hager, Theodor, Mayence, Germany. Wire rope and cable.	Apr. 23, 1878	1045	300	13	755
	Hager, William H. (See Thompson, John H., assignor.)					
	Hagerstown Agricultural Implement Manufacturing Company. (See Keller, John F., assignor.)					
200, 909	Hagerty, Edward, New York, N. Y. Cap for glass syringes.	Mar. 5, 1878	91	31	13	429
204, 817	Hagerty, James S., Baltimore, Md. Dinner-kettle.	June 11, 1878	418	121	13	1071
192, 641	Hagerty, Thomas, Brooklyn, N. Y. Ribbon-block.	Jan. 20, 1878	987	287	13	196
211, 009	Same. Machine for pressing and rolling plastic material.	Dec. 17, 1878	705	194	14	991
199, 905	Haggard, Eliza C. (See Haggard, John W., assignor.)					
	Haggard, John W., assignor of one-half interest to Eliza C. Haggard, Bloomington, Ill. Combined harrow and clod-crusher.	Feb. 5, 1878	14	5	13	235
206, 560	Haggard, W. S. (See Brown, Lorenzo D., assignor.)					
	Haggas, Joseph, Uxbridge, assignor of one-half interest to William Goodesham, Toronto, Ontario, Canada. Feeding locomotive-tenders.	July 30, 1878	1258	302	14	184
8, 094	Haggerty, James W. (See Moreau & Haggerty.)					
	Hagins, Joe J., Rock Hill, S. C. Bale-tie. (Reissue.)	Feb. 10, 1878	735	215	13	862
199, 153	Hague, Charles A. (See Bradley & Hague.)					
	Hague, Charles A., Chicago, Ill. Sulky-plow.	Jan. 15, 1878	459	135	13	87
207, 272	Hague, Will. (See Atherton, Robert, assignor.)					
	Haigh, Benjamin F., assignor to Thomas Dolan and R. Williams, jr., Philadelphia, Pa. Carding-machine.	Aug. 20, 1878	653	194	14	296
200, 864	Haight, D. M., et al. (See Richards, Marcus C., assignor.)					
	Hailes, William, and James Gray, Albany, N. Y. Coal-oil stove.	Mar. 5, 1878	49	17, 18	13	422
209, 885	Hain, David. (See Hain, Martin and David.)					
202, 107	Hain, Martin and David, Hermann, Mo. Plow attachment.	Nov. 12, 1878	380	114	14	736
8, 139	Haines, Charles, Manchester, Me. Stump-extractor.	Apr. 9, 1878	266	78	13	641
200, 450	Haines, John W., Cambridgeport, Mass. Silvered-glass door-knob. (Reissue.)	Mar. 20, 1878	1103	334	13	592
204, 564	Haines, John W., Cambridge, Mass. Attaching shanks to door-knobs.	Feb. 19, 1878	579	171	13	338
207, 650	Same. Dredge-bottle.	June 4, 1878	132	44	13	1031
201, 522	Same. Mold for blowing glass-vessels.	Sept. 3, 1878	75	22	14	358
	Haines, Peter P., assignor to Wilson Packing Company, Chicago, Ill. Soldering-tool.	Mar. 19, 1878	732	223	13	536
202, 344	Haines, Risley C. (See Benner, Lorenzo D., assignor.)					
209, 240	Haines, William, Philadelphia, Pa. Adjustable watch-key.	Apr. 16, 1878	533	150	13	682
209, 676	Same. same.	Oct. 29, 1878	983	286	14	640
	Haire, Daniel, Lime Spring, Iowa. Spring bed-bottom.	Nov. 5, 1878	155	45	14	701
209, 040	Hake, Adam, et al. (See Yinger, Franklin S., assignor.)					
	Haldeman, Charles D. and Isaac, West Liberty, Iowa. Gate.	Oct. 15, 1878	644	186	14	598
	Haldeman, Isaac. (See Haldeman, Charles D. and Isaac.)					



## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Drig.	Vol.	Page.
208, 681	Hale, Albert W., New York, N. Y. Picture-frame.....	Oct. 8, 1878	241	69	14	529
199, 061	Hale, George, <i>et al.</i> (See Underwood, Henry M., assignor.)					
8, 041	Hale, George C., assignor to self and F. C. White, Kansas City, Mo. Rotary engine....	Jan. 8, 1878	348	102	13	70
202, 257	Hale, Henry S., Philadelphia, Pa. Chair-bottom..... (Reissue)...	Jan. 15, 1878	655	193	13	118
210, 777	Same Wash-stand.....	Apr. 9, 1878	422	123	13	663
	Same Wardrobe-bedstead.....	Dec. 10, 1878	425	118	14	888
	Hale & Kilburn Manufacturing Company. (See Howson, Henry, assignor.)					
	Same (See Kilburn, Cheney, assignor.)					
203, 266	Hale & Mulford. (See Hein, Charles, assignor.)					
201, 006	Hale, Richard, Ledyard, N. Y. Manufacturer of manganese alloys.....	May 7, 1878	30	.....	13	825
210, 253	Hale, Robert, Minneapolis, Minn. Wire-band cutter.....	Mar. 5, 1878	184	59	13	443
	Same Letter-box.....	Nov. 26, 1878	800	237	14	792
	Hale, William E. (See Bailey, George H., assignor.)					
	Haley, Christina J. (See Eberle, Rachel, assignor)..... (Reissue.)					
202, 258	Haley, John, New Brighton, Pa. Machine for welding chain-links.....	Apr. 9, 1878	423	{ 123 124 }	13	663
199, 364	Hall, Aaron, jr., Saint Johnsville, N. Y. Machine for planing octagonal blanks for clothes-pins.....	Jan. 22, 1878	680	199	13	130
204, 969	Hall, Abraham, Bethlehem, Ky. Horse-power.....	June 18, 1878	594	173	13	1097
201, 411	Hall, Albert, Cypress Hill, N. Y. Lamp-extinguisher.....	Mar. 19, 1878	625	191	13	520
199, 288	Hall, Albert F., assignor to George F. Blake Manufacturing Company, Boston, Mass. Double-acting steam-pump.....	Jan. 15, 1878	590	172	13	108
	Hall, Alfred. (See Gingras, Timothy, assignor.)					
199, 537	Hall, Alvin O., assignor to self and George C. Smith, Cincinnati, Ohio. Piano-hammer	Jan. 22, 1878	853	249	13	157
8, 479	Hall, Cassius L., Ypsilanti, Mich., assignor of part interest to Samuel W. and George W. Parsons. Coffee and peanut roaster..... (Reissue)...	Nov. 5, 1878	232	69	14	712
203, 267	Hall, Cofran I., Vallejo, Cal. Straw-burning furnace.....	May 7, 1878	33	10	13	825
203, 444	Hall, Daniel, Covington, Ky. Bale-tie.....	May 7, 1878	223	63	13	851
209, 041	Hall, Edwin L., Philadelphia, Pa. Locomotive head-light.....	Oct. 15, 1878	645	187	14	586
200, 611	Hall, Elias Palmer, Chicago, Ill. Window-cleaning device.....	Feb. 26, 1878	757	222	13	373
204, 968	Hall, Frank H., Bridgeport, Conn. Horseshoe.....	June 18, 1878	593	173	13	1097
204, 563	Hall, George A., Waterford, Me. Vehicle-tire tightener.....	June 4, 1878	131	44	13	1031
207, 414	Hall, George B., Fort Plain, assignor to Charles Whyland, Saint Johnsville, N. Y. Peanut roaster.....	Aug. 27, 1878	812	240	14	320
	Hall, George F. (See Walker, Samuel, assignor.)					
210, 322	Hall, George L., Boston, Mass. Machine for finishing horseshoe-nails.....	Nov. 26, 1878	874	257	14	808
	Hall, George Washington. (See Wilson & Hall.)					
	Hall, Henry. (See King, William, assignor.)					
206, 234	Hall, Henry O., and Henry J. Durgin, Rochester, N. Y. Table.....	July 23, 1878	875	250	14	132
	Hall, James F. (See Cook & Hall.)					
210, 604	Hall, James Madison, Larissa, Tex. Cotton and corn planter.....	Dec. 10, 1878	246	67	14	865
202, 813	Hall, John C., Monroe, Ohio. Speculum.....	Apr. 23, 1878	1046	300	13	755
203, 728	Hall, John C., Cincinnati, Ohio. Wardrobe-bedstead.....	May 14, 1878	527	149	13	899
239, 167	Hall, Joseph B., Chicago, Ill. Ship-building.....	Oct. 22, 1878	802	233	14	612
204, 034	Hall, Joseph J., assignor of one-half interest to Charles H. Murray, Chicago, Ill. Wash-boiler.....	May 21, 1878	867	248	13	949
	Hall, Joseph L. (See Cook & Hall.)					
206, 872	Hall, Joseph L., Cincinnati, Ohio. Time-lock.....	Aug. 13, 1878	235	75	14	240
200, 285	Hall, Julius, 90 Chancery Lane, London, England. Boring and drilling apparatus.....	Feb. 12, 1878	400	119	13	303
210, 850	Hall, Leonard H., Erie, Pa. Hoisting-machine.....	Dec. 17, 1878	511	145	14	908
199, 703	Hall, Luther, and Zebina and William Crowell, Dennis, Mass. Cranberry-picker.....	Jan. 29, 1878	1047	306	13	195
	Hall's Southern Cotton Gin Company, S. Z. (See Drake, John C., assignor.)					
200, 056	Hall, Thomas, Brooklyn, N. Y., and Thomas J. Whitney, Philadelphia, Pa. Oil-stove..	Feb. 5, 1878	166	54	13	259
209, 677	Hall, Thomas G., New York, N. Y. Cutting-nipper.....	Nov. 5, 1878	156	45	14	702
206, 439	Hall, William A., Saint Louis, Mo. Type-writing machine.....	July 30, 1878	1129	{ 323 324 }	14	167
205, 545	Hall, William H., Tiffin, Ohio. Horse hay-rake.....	July 2, 1878	86	24	14	20
203, 032	Same Corn-sheller.....	Apr. 30, 1878	1280	370	13	789
200, 284	Hall, William P., Piqua, Ohio. Artificial teeth.....	Feb. 12, 1878	400	119	13	303
	Hall, Zebina. (See Hall & Crowell.)					
209, 886	Halladay, Albert A., Bellows Falls, Vt. Rocking-chair.....	Nov. 12, 1878	382	114	14	736
203, 445	Hallam, Robert W., assignor to Meriden Cutlery Company, West Meriden, Conn. Carving-fork.....	May 7, 1878	224	63	13	851
208, 300	Hallas, James G., assignor to Benedict & Burnham Manufacturing Company, Waterbury, Conn. Lamp-burner.....	Sept. 24, 1878	802	234	14	463
204, 033	Hallberg, Frederick Pontus, Green Point, N. Y. Water-pipe joint.....	May 21, 1878	866	248	13	949
204, 967	Halleck, Samuel P., Oriskany, N. Y. Feed-gage.....	June 18, 1878	592	173	13	1097
203, 145	Haller, Ella G., Philadelphia, Pa. Self-lighting lamp.....	Apr. 30, 1878	1391	{ 406 407 }	13	804
199, 012	Hallett, Enoch, Hillsdale, Mich. Fence.....	Jan. 29, 1878	967	287	13	186
202, 721	Hallett, Henry H., Rockland, Mass. Work-trimmer for sewing-machines.....	Apr. 23, 1878	946	271	13	742
	Hallett, William C. (See Armit, Robert Henry, assignor.)					
209, 120	Hallett, William R. Adjustable reel for reapers.....	Oct. 22, 1878	753	219	14	605
204, 147	Hallow George F., Princeton, N. J. Screen.....	May 28, 1878	1005	286	13	970
210, 851	Hallidie, Andrew S., San Francisco, Cal. Clip for rope tramway.....	Dec. 17, 1878	512	145	14	908
207, 963	Hallner, Andrew, and John S. Lindquist, Swedeburg, Nebr. Cattle-guard.....	Sept. 10, 1878	408	123	14	404
199, 538	Hallner, John, Ithaca, Nebr. Barbed fence.....	Jan. 22, 1878	854	250	13	157
205, 381	Same Fence.....	June 25, 1878	1030	306	13	1160
	Hallock, John K. (See Southard, Crowell & Hallock.)					
205, 955	Hallock, John K., and Ernest B. Blood, assignors, by mesne assignments, to Frank Gunnison, Erie, Pa. Machine for making lamp-black.....	July 16, 1878	558	159	14	88
205, 783	Hallock, Valentine H., Queens, N. Y. Exhaust mechanism.....	Aug. 6, 1878	132	41	14	223
199, 643	Halloway, Edwin, Belvidere, Ill. Egg-tester.....	Jan. 29, 1878	988	287	13	186
200, 192	Halpine, Peter C., assignor of one-half interest to William Roberts, Waltham, Mass. Asbestos sheathing-paper.....	Feb. 12, 1878	310	92	13	289
	Halsey, Elisha L. (See Scanlan, Charles A., assignor.)					
205, 858	Halsey, James T., Altoona, Pa. Railway-signal.....	July 9, 1878	438	125	14	68
103, 430	Halsey, Joseph S., Lebanon, Ohio. Carbonic-acid-generating attachment to fire-engine hose.....	Jan. 22, 1878	746	218	13	140
202, 024	Halstead, Benton, Cincinnati, Ohio. Type-writing machine.....	Apr. 2, 1878	160	47	13	622
201, 268	Halstead, Charles, New York, N. Y. Coffee-pot.....	May 7, 1878	34	10	13	825
	Halteman, Jacob L. (See Westcott & Halteman.)					
200, 451	Halter, David Roland, Lee's Cross-Roads, Pa. Car-coupling.....	Feb. 19, 1878	580	171	13	338
205, 546	Halvorson, Halvor, assignor to G. W. Whittenmore, Nashua, N. H. Bottle-stopper fastener.....	July 2, 1878	87	24	14	20

*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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207, 516	Ham, C. T., <i>et al.</i> (See Orphy, John W., assignor.)					
	Ham, Charles T., assignor to Buffalo Steam and Lantern Company, Rochester, N. Y.					
	Lantern	Aug. 27, 1878	921	271	14	334
205, 839	Hamble, Melvin D., Marshalltown, Iowa. Egg-beater	July 9, 1878	440	125	14	68
202, 025	Hamblin, Henry M., Greenville, Pa. Balanced slide-valve	Apr. 2, 1878	164	47, 48	13	622
202, 166	Hamblin, Samuel, Greenville, Pa. Link for valve-motions	Apr. 9, 1878	333	98	13	650
204, 216	Hambrook, Richard T., Chicago, Ill. Refrigerator	May 28, 1878	1083	309	13	930
206, 875	Same..... Hinge for folding seats	Aug. 13, 1878	239	76	14	240
202, 026	Hamelback, Duncan, <i>et al.</i> (See Hamelback, Jacob, assignor.)					
	Hamelback, Jacob, assignor to self and William and Duncan Hamelback, Hopewell, Ohio. Combined cultivator and corn-planter	Apr. 2, 1878	165	48	13	623
	Hamelback, William, <i>et al.</i> (See Hamelback, Jacob, assignor.)					
	Hamermiller, William. (See Emmerich & Hamermiller.)					
210, 687	Hamill, William John, Saint Catharines, Ontario, Canada. Trotting-sulky	Dec. 10, 1878	333	91	14	876
200, 828	Hamilton, Charles L., Roxborough, Pa. Cooling beating-engines for paper-pulp	Mar. 5, 1878	14	5	13	417
	Hamilton, Frank P. (See Millard, Orson, assignor.)					
201, 775	Hamilton, George W., Fredericksburg, Va. Cigar-mold	Mar. 26, 1878	1004	307	13	579
200, 319	Hamilton, Homer, assignor, by mesne assignments, to Brown, Bonnell & Co., Youngstown, Ohio. Journal-box for rolling-mill pinions	July 23, 1878	980	279	14	145
	Hamilton, James McClung. (See Shea & Hamilton.)					
207, 603	Hamilton, John C., Fort Wayne, Ind. Horseshoe	Sept. 3, 1878	19	7	14	352
	Hamilton, R. W. (See Priumn, William Wesley, assignor.)					
203, 446	Hamilton, Mark J., Whitmarsh, Pa. Metallurgic gas-generator	May 7, 1878	225	64	13	851
	Hamilton, Mark R. (See Vivarttas, Aloha, assignor.)					
208, 591	Hamilton, Nathan T., Cedar Falls, Iowa. Bed-bottom	Oct. 1, 1878	138	40	14	567
	Hamilton, Oliver M. (See Buckingham & Hamilton.)					
	Hamilton, Robert. (See Clark & Hamilton.)					
203, 337	Hamilton, Robert W., Hartford, Conn. Condenser	May 7, 1878	105	30, 31	13	824
206, 561	Hamilton, Samuel McLeary, Fort Smith, Ark. Harness-buckle	July 30, 1878	1259	362	14	184
204, 320	Hamilton, William, Allegheny, Pa. Burial-casket	May 28, 1878	1186	337	13	993
205, 956	Hamilton, William R., and G. Canning Smith, Mendocino, Cal. Railway-car truck	July 16, 1878	560	159 160	14	88
205, 743	Hamlin, Charles A., Greenbush, assignor to Ransom Stove Works, Albany, N. Y. Stove	July 9, 1878	316	92	14	52
206, 440	Same..... Automatic ash-guard for stoves	July 30, 1878	1132	325	14	168
207, 604	Same..... Cooking and heating stove	Sept. 3, 1878	10	7, 8	14	352
203, 615	Hamlin, E. C., <i>et al.</i> (See Allen, Norman, assignor.)					
	Hammer, Charles Otto, assignor of one-half interest to William Sunderman, Pittsburg, Pa. Bottle-stopper fastener	May 14, 1878	409	117	13	884
202, 167	Hammer, Gustav F., Cincinnati, Ohio. Cylinder-cock	Apr. 9, 1878	334	98	13	60
8, 460	Hammerschlag, Siegfried, Jersey City, N. J. Waxing-paper	Oct. 22, 1878	945	276	14	631
200, 393	Same..... (Reissue.)					
199, 437	Same..... (Reissue.)	Oct. 29, 1878	1036	301	14	634
205, 482	Hammersmith, Henry W., South Bend, Ohio. Rail-joint	Jan. 22, 1878	747	218	13	110
	Hammersstein, Oscar, New York, N. Y. Cigar-case	July 2, 1878	19	6	14	11
	Hammonasset Sole Leather Company. (See Timmerholm, Charles J., assignor.)					
201, 776	Hammond, Austin S. and Daniel W., Independence, Iowa. Window-blind closer	Mar. 26, 1878	1005	307	13	579
	Hammond, Daniel W. (See Hammond, Austin S. and D. W.)					
204, 726	Hammond, Fred Putnam, Aurora, Ill. Inking-pad	June 11, 1878	316	90	13	1060
204, 665	Hammond, Henry, assignor to Horace Cornwall, Hartford, Conn. Hammer	June 11, 1878	249	78	13	1051
207, 117	Hammond, Thomas Clement, Sacramento, Cal. Hatchet-wrench	Aug. 20, 1878	492	148	14	275
	Hamner, Luther J., <i>et al.</i> (See Eubank, Reuben B., jr., assignor.)					
	Hamplen Watch Company. (See Higginbotham, Charles T., assignor.)					
190, 704	Hampton, Emma S., Detroit, Mich. Dish-washer	Jan. 29, 1878	1048	306	13	195
205, 146	Hance, Archibald, New York, N. Y. Whiffletree	Apr. 30, 1878	1392	407	13	805
107, 736	Same..... Fender for car-platform	Sept. 3, 1878	155	47	14	369
8, 319	Hanchett, M. Waldo, Syracuse, N. Y. Piano-forte attachment	July 2, 1878	283	84	14	44
8, 028	Hancock, George, Providence, R. I. Sewing-machine	Jan. 8, 1878	452	127	13	53
8, 178	Hancock, George, Passaic, N. J. Sewing-machine	Apr. 16, 1878	835	241	13	721
	Hancock, Parker C. (See Griffin, George W., assignor.)					
204, 321	Hand, James C. and Frederick Caulier, assignors to Harlan P. Blackman and Charles S. Greene, Philadelphia, Pa. Wardrobe-bedstead	May 28, 1878	1187	338	13	993
205, 079	Hand, Thomas B., Baltimore, Md. Mechanism for stopping runaway horses	June 18, 1878	700	207 208	13	1112
203, 823	Hand, Thomas Barton, Baltimore, Md. Harness attachment	May 21, 1878	641	180 181	13	920
201, 243	Hand, S. Ashton, Philadelphia, Pa. Differential-pressure regulator	Mar. 12, 1878	430	132	13	483
208, 811	Handforth, Benjamin, Hoboken, N. J. Shade-roller	Oct. 8, 1878	384	109	14	547
204, 434	Handley, Eli, Perry, and Thomas G. Orwig, Des Moines, Iowa. Door-sill and weather-strip	June 4, 1878	19	7	13	1015
203, 447	Handover, Charles Morey, Brooklyn, N. Y. Ventilator	May 7, 1878	226	64	13	851
204, 566	Same..... Pipe-coupling nipple	June 4, 1878	134	45	13	1031
	Handren & Ripley. (See Dickey, William D., assignor.)					
	Handwerk, Frank B. (See Horrie, Malcolm, assignor.)					
208, 592	Handy, William, Brooklyn, N. Y. Ink-feeding device for paper-ruling machine	Oct. 1, 1878	139	40	14	507
205, 959	Hanersperger, Peter, assignor to B. H. Towner, Homer, Ill. Pounder washing-machine	July 16, 1878	563	161	14	89
208, 087	Haney, William, East Haven, Conn. Auger	Sept. 17, 1878	546	163	14	427
206, 784	Hankin, William, sr., Seelyville, Pa. Buck-saw frame	Aug. 6, 1878	133	42	14	223
200, 829	Hanks, Edmund F., Jersey City, N. J. Slab and bottle-holder for dentists	Mar. 5, 1878	15	5	13	417
202, 814	Same..... Hammock	Apr. 23, 1878	1047	301	13	754
190, 201	Hanks, Horace Tracy, New York, N. Y. Oil-chamber for lamps	Jan. 15, 1878	506	149	13	45
210, 524	Hanks, Oscar, assignor of two-thirds interest to Henry W. Wilson and George J. Birnbaum, Cincinnati, Ohio. Check-rein attachment	Dec. 3, 1878	146	38	14	842
206, 015	Hanks, William R., Needham, assignor to Frederick A. Brown, Newton, Mass. Vapor-burner	July 16, 1878	618	178	14	96
8, 402	Hanlon, John, New York, N. Y., assignor, by mesne assignments, to National Petroleum Gas Company. Gas apparatus	Sept. 3, 1878	223	69	14	376
203, 909	Hanlon, John, New York, N. Y. Gas apparatus	May 21, 1878	731	209 210	13	892
203, 925	Same..... (Reissue.)	May 21, 1878	745	215	13	934
	Hann, Edmund P., <i>et al.</i> (See Varna, Harvey B., assignor.)					
209, 258	Hanna, Francis J., Kane City, Pa. Oil-well pump	Oct. 22, 1878	887	250	14	624
	Hanna, William W. (See Smith, George, assignor.)					
	Hannibal Meat Company (limited). (See Perkins & Brown, assignors.)					
	Hanrahan, Joseph P. (See Wisewell, Lucius N., assignor.)					
200, 042	Hanscom, Charles E., assignor, by mesne assignments, to Jennie H. Hanscom, New York, N. Y. Railway-signal	Oct. 15, 1878	646	187 188	14	586

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
206, 562	Hanscom, Jennie H. ( <i>See</i> Hanscom, Charles E., assignor.)					
201, 523	Hansell, Jacob, assignor to self, Thomas H. Kemble, and James P. McClintic, Philadelphia, Pa. Car-starter	July 30, 1878	1259	362	14	184
210, 027	Hansell, Walter P., Pittsburg, Pa. Car-spring	Mar. 19, 1878	733	223	13	536
202, 108	Same. .... same	Nov. 19, 1878	546	164	14	761
199, 435	Hansen, August, San Francisco, Cal. Sofa-bed	Apr. 9, 1878	208	78, 79	13	641
211, 010	Hansen, Charles, assignor to self, S. Oerting, Ebeltorf, Denmark, N. H. Holmes, Montgomery, Ala., and P. J. McKenzie Oerting, Washington, Fla. Paper panel to imitate wood	Jan. 22, 1878	745	.....	13	140
207, 118	Hansen, Hans R. M. J., Copenhagen, Denmark. Type-writing machine	Dec. 17, 1878	706	195	14	931
203, 624	Hansen, Johan, San Francisco, Cal. Griper for wire-rope railways	Aug. 20, 1878	493	148	14	275
208, 593	Hansen, Ladley L., Palmyra, N. Y. Barrel	May 21, 1878	643	181	13	920
210, 525	Hansen, Lorenz. ( <i>See</i> Nordblom & Hansen.)					
200, 529	Hansen, Thoror, and George Henry Weiffenbach, Racine, Wis. Currier's knife	Oct. 1, 1878	140	41	14	508
210, 526	Hansley, Tobias A., Dayton Township, Butte County, Cal. Harrow	Dec. 3, 1878	147	38	14	842
205, 382	Hanson, Francis, assignor of one-half interest to M. Green, Nevada City, Cal. Insect and vermin fumigator	Feb. 19, 1878	657	193	13	350
205, 382	Hanson, Francis O., Philadelphia, Pa. Iron fence	Dec. 3, 1878	147	38	14	842
199, 539	Hanvey, Alexander. ( <i>See</i> Grafton, William S., assignor.)					
201, 007	Hanvey, Thomas, Rochester, N. Y. Veneer-cutting machine	June 25, 1878	1034	306	13	1160
203, 624	Hape, William. ( <i>See</i> Harcum, Andrew, assignor.)					
200, 286	Harbaugh, George A., Bellefonte, Pa. Pipe-tongs	Jan. 22, 1878	855	250	13	157
201, 007	Same. .... Turbine water-wheel	Mar. 5, 1878	185	59	13	444
200, 286	Harbaugh, Joseph W., Alma, Kans. Lifting-jack	July 2, 1878	177	53	14	32
203, 637	Harbin, George W. ( <i>See</i> Harbin, James W., assignor.)					
206, 563	Harblir, James W., Evansville, Ind., assignor of one-half interest to George W. Harbin, Waterloo, Iowa. Corn-planter	Feb. 12, 1878	401	119	13	803
202, 047	Harbinc, John Thomas, Xenia, Ohio. Oil-press	July 2, 1878	178	53	14	32
201, 412	Same. .... Mat for oil-presses	July 30, 1878	1260	363	14	184
207, 119	Harcum, Andrew, assignor to self and William Hape, Scott Township, Allegheny County, Pa. Ornamenting glassware	Apr. 23, 1878	872	250	13	734
210, 254	Hard, John W., Decorah, Iowa. Sectional steam-boiler	Mar. 19, 1878	625	191	13	520
203, 729	Harder, Dennis R., Chicago, Ill. Railway-rail joint	Aug. 20, 1878	494	148	14	275
209, 474	Hardick, Henry, Liberty, N. Y. Fence	Nov. 26, 1878	801	237	14	799
210, 005	Hardie, Robert, Govan, John James, Edinburgh, North Britain, and James G. Cooper, Brooklyn, assignors, by mesne assignments, to Pneumatic Tramway Engine Company, New York, N. Y. Valve for compressed-air engines	May 14, 1878	528	150	13	899
199, 974	Hardie, Robert, Govan, John James, Edinburgh, North Britain, and James G. Cooper, Brooklyn, assignors to Pneumatic Tramway Engine Company, New York, N. Y. Valve-gear for engines	Oct. 29, 1878	1118	326	14	600
204, 819	Harding, Edward S., Baltimore, Md., assignor to John N. and Joseph Hibner, Hamilton, Ohio. Plaiting-machine	Dec. 10, 1878	246	67	14	865
207, 415	Harding, John Waller, and Isaac Towell, Columbus, Tex. Safety-guard for cars	Feb. 5, 1878	83	27	13	246
205, 638	Harding, Justus, Goshen, Ind. Ventilator attachment for cook-stoves	June 11, 1878	414	122	13	1071
200, 301	Hards, James T., Geneva, Ill. Thill-coupling	Aug. 27, 1878	812	240	14	321
201, 608	Hardwick, Harry, Philadelphia, Pa. Carpet-fabric	July 2, 1878	170	54	14	32
200, 301	Hardwick, Joseph Warren, Weymouth, Mass. Hot-water heater for buildings	Feb. 19, 1878	523	154	13	329
201, 608	Hardy, Clinton R., Lexington, Ind. Stock-feed boiler	Mar. 26, 1878	890	273	13	562
190, 540	Hardy, John George. ( <i>See</i> Hardy, John and John G.)					
208, 170	Same. .... ( <i>See</i> Hardy, John and John George.)					
204, 818	Hardy, John and John George, Vienna, Austria. Vacuum-brake for railway-cars	Jan. 22, 1878	855	250	13	157
208, 170	Hardy, John and John G., Vienna, Austria. Railway-brake	Sept. 17, 1878	640	188	14	439
204, 818	Hargitt, Jerviss. ( <i>See</i> Schroeder, J. Lee, assignor.)					
208, 171	Hargrave, Richard W., Marshalltown, Iowa. Fence-wire fastener	June 11, 1878	414	121	13	1071
204, 322	Hargreaves, James, Newark, N. J. Elliptic spring	Sept. 17, 1878	642	188 } 189	14	439
201, 413	Harkins, Charles, Atlanta, Ga., assignor of one-third interest to Lorin Blodgett, Philadelphia, Pa. Military accoutrement	May 28, 1878	1188	338	13	904
200, 392	Harkness, Edwin, Vincennes, Ind. Vault	Mar. 19, 1878	626	191	13	520
8, 283	Harlan, Joseph, Lexington, Ind. Apparatus for pressing butter	Feb. 19, 1878	524	154	13	329
207, 805	Harlow, Charles F., Boston, assignor, by mesne assignments, to W. L. Groat, East Stoughton, Mass. Sewing-machine	June 11, 1878	492	142	13	1080
201, 606	Harlow, Lucius, Holyoke, Mass. Machine for feeding paper	Sept. 10, 1878	235	74	14	382
200, 867	Harmon, Orville S., Brooklyn, N. Y. Exercising-machine	Mar. 26, 1878	839	254	13	554
200, 888	Harmon, Orville S., Brooklyn, assignor one-half interest to Frederick A. Phillips, New York, N. Y. Coin-holder	Nov. 12, 1878	883	114	14	736
202, 168	Same. .... same	Nov. 12, 1878	384	114	14	736
207, 031	Harnah, William, New York, N. Y. Machine for eyeletting umbrella-cases	Apr. 9, 1878	336	98	13	650
208, 172	Harner, David S., Xenia, Ohio. Corn-marker	Aug. 13, 1878	391	120	14	258
200, 287	Harner, John H. ( <i>See</i> Keech, David M., assignor.)					
208, 812	Harper, Charles A., Jersey City, N. J., assignor of two-thirds interest to John W. Russell and F. A. Potter. Hand-truck	Sept. 17, 1878	644	189	14	440
209, 849	Harper, Charles F., et al. ( <i>See</i> Healy, David, assignor.)					
207, 273	Harper, James, assignor of one-half interest to R. J. Richardson, Pittsburg, Pa. Machine for forming cultivator-points	Feb. 12, 1878	402	110 } 120	13	303
207, 273	Same. .... Stove-handle	Oct. 8, 1878	385	109	14	547
204, 323	Harper, James M., El Paso, Ill. Base for stoves	Nov. 12, 1878	385	115	14	736
204, 323	Same. .... Stove-handle	Aug. 20, 1878	654	194	14	295
204, 323	Harper, Joe C., Pittsburg, Pa. Bale-tie					
204, 323	Harper, John E., et al. ( <i>See</i> Smith, Mark A., assignor.)					
204, 323	Harper, Robert W., Evansville, Ind. Wash-board	Oct. 1, 1878	141	41	14	508
210, 941	Harper, Samuel. ( <i>See</i> Gearing, Charles, assignor.)					
204, 323	Harper, Wilson, Fulk's Run, Va. Seed and fertilizer distributor	May 28, 1878	1189	339	13	994
204, 323	Harrigan, Dennis, Somerville, Mass., assignor of one-half interest to John F. Crackett, Laccnia, N. H. Adjustable exhaust for locomotives	Dec. 17, 1878	627	174	14	922
204, 805	Harrington, Amasa, Westborough, Mass. Potato-slicer	June 18, 1878	520	152	13	1088
204, 805	Harrington, Daniel, Chicago, Ill. Step for mill-spindles	Oct. 8, 1878	295	85	14	536
199, 614	Harrington, George, Springfield, Mass. Spool-box	Jan. 29, 1878	989	288	13	186
202, 722	Harrington, Henry H. ( <i>See</i> Tavenner, Robert W., assignor.)					
207, 353	Harrington, Hiram and Jacob, Woodstock, Ontario, Canada. Portable fence	Apr. 23, 1878	947	271	13	742
202, 815	Harrington, Jacob. ( <i>See</i> Harrington, Hiram and Jacob.)					
202, 815	Harrington, Jeremiah A., Melrose, Mass. Folding hat	Aug. 27, 1878	749	223	14	313
202, 815	Harris, Ansel J. and Frederick E., Boston, Mass. Apparatus for indicating the direction of the wind	Apr. 23, 1878	1040	301	13	753
202, 815	Harris, Benjamin C. W., and Frank M. Williams, Mount Gilead, Ohio. Weather-strip	May 7, 1878	227	64	13	851
202, 815	Harris, Charles, Brooklyn, N. Y. Drawer for bureaus	Jan. 29, 1878	1162	341	13	213
202, 815	Harris, Charles B., New York, N. Y. Car-axle box	July 30, 1878	1261	363	14	184

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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206, 565	Harris, Charles B., New York, N. Y. Fare-register .....	July 30, 1878	1262	363	14	184
205, 080	Harris, David, assignor of one-half interest to John G. Cozine, Brooklyn, N. Y. Machine for making button-hole linings .....	June 18, 1878	702	364	13	1112
	Harris, Edward. (See Whightsil, Philip, assignor.) .....			208		
203, 338	Harris, Edward Leontidas, Red Banks, Miss. Gin-saw filer .....	May 7, 1878	106	31	13	824
8, 382	Harris, Elbridge, Boston, Mass. Bottle-stopper. (Reissue) .....	Aug. 20, 1878	720	215	14	364
210, 028	Harris, Fradelsion, Louisiana, Mo. Piano-violin .....	Nov. 19, 1878	547	164	14	761
205, 547	Harris, Fred. B., assignor of one-half interest to Adin G. Gage, Batavia, N. Y. Egg-tester .....	July 2, 1878	88	25	14	20
	Harris, Frederick E. (See Harris, Ansel J., and Frederick E.) .....					
	Harris, George Polhill. (See Smeeth & Harris.) .....					
209, 563	Harris, George W., and Augustus L. Allen, Poughkeepsie, N. Y. Apparatus for the manufacture of gas .....	Nov. 5, 1878	30	9	14	685
206, 441	Harris, Henry, Knobnoster, Mo. Nut-lock .....	July 30, 1878	1133	325	14	168
210, 527	Harris, Henry Allen, Katonah, N. Y. Load-binder .....	Dec. 3, 1878	148	39	14	842
	Harris, James, et al. (See Ebert, William C., assignor.) .....					
200, 288	Harris, James, Jaucesville, Wis. Harvester .....	Feb. 12, 1878	403	120	13	303
200, 289	Same. Mower .....	Feb. 12, 1878	404	120	13	303
204, 148	Same. Harvester-gearing .....	May 28, 1878	1006	121	18	970
	Harris, John B., et al. (See Patterson, William W., assignor.) .....					
200, 393	Harris, Joseph, Allegheny, Pa. Steam-heater for oil-wells .....	Feb. 19, 1878	525	155	13	330
206, 442	Harris, Joshua Washington, Waynesborough, assignor of one-half interest to James W. Weade, Augusta County, Va. Vehicle-wheel .....	July 30, 1878	1134	325	14	108
	Harris Manufacturing Company. (See Cobb, Samuel C., assignor.) .....					
201, 777	Harris, Milo, Jamestown, N. Y. Draft attachment for plows .....	Mar. 26, 1878	1006	307	13	579
203, 725	Harris, Milo, Charles E. and Nathaniel W. Meade, Jamestown, N. Y. Blotter-tablet .....	Aug. 6, 1878	69	22	14	216
206, 443	Harris, Norman C., Poultney, Vt. Churn .....	July 30, 1878	1134	325	14	168
210, 778	Harris, Orrin C., Newport, N. Y. Cheese-cloth cutter .....	Dec. 10, 1878	427	119	14	888
210, 528	Harris, Samuel, jr., Boston, and Samuel Shepherd, Nashua, N. H.; said Harris assignor of all and Shepherd assignor of one-third interest to H. L. Hazelton, Boston, Mass. Machine for feeding nails to boot and shoe heeling devices .....	Dec. 3, 1878	140	39, 40	14	843
206, 444	Harris, Sheldon, Emerson, Whitesburg, Tenn. Combined seed-planter and cultivator .....	July 30, 1878	1135	326	14	168
209, 475	Harris, Thomas C., Wilmington, Del. Mode and mechanism for testing the balance of wheels and pulleys .....	Oct. 29, 1878	1119	327	14	600
209, 476	Harris, Thomas C., Wilmington, Del. Grinding and finishing cylindrical objects .....	Oct. 29, 1878	1121	327	14	661
264, 606	Harris, Wesley, Topeka, Kans. Washing-machine .....	June 11, 1878	250	78	13	1651
210, 029	Harris, William, Greenville, assignor of one-half interest to Henry R. Weeks, Mount-calm County, Mich. Branscouter .....	Nov. 19, 1878	548	164	14	761
	Harris, William H. (See Salmon & Harris.) .....					
	Harrison, Barbara. (See Harrison, John D.) .....					
	Harrison Brothers & Co. (See Harrison, George L., jr., assignor.) .....					
8, 189	Harrison, Charles, New York, N. Y. Drip-tray for water-closet bowls. (Reissue) .....	Apr. 23, 1878	1154	331	13	763
159, 062	Harrison, Edward, New Haven, Conn. Grinding-mill .....	Jan. 8, 1878	350	103	13	71
211, 011	Harrison, George L., jr., Philadelphia, Pa., assignor to Harrison Brothers & Co. Metallic can .....	Dec. 17, 1878	707	195	14	931
	Harrison, George R. (See Fay, Richard, assignor.) .....					
	Harrison, H. L. (See Brackett, Atwater E., assignor.) .....					
	Harrison, H. W., et al. (See Harrison, Theophilus, assignor.) .....					
	Harrison, Harry, et al. (See Ross, William B. and James S., assignors.) .....					
	Harrison, Harry. (See Vanclain, John A. P., assignor.) .....					
208, 813	Harrison, John, Cleveland, Ohio. Stove-pipe .....	Oct. 8, 1878	386	109	14	548
209, 910	Harrison, John B., Cincinnati, Ohio. Ash-pan for locomotives .....	Mar. 5, 1878	91	31	13	429
8, 394	Harrison, John D., deceased, by Farmers' Friend Manufacturing Company, Dayton, Ohio, assignee of Barbara Harrison, William S. Marshall, and Simon Golden. Seeding-machine .....	Sept. 3, 1878	214	66	14	375
	Harrison, John W., et al. (See Shickle, Frederick, assignor.) .....					
203, 241	Harrison, John W., Niles, Mich. Dumping-wagon .....	Oct. 29, 1878	984	286	14	640
	Harrison, Mike. (See Thorwarth & Harrison.) .....					
200, 290	Harrison, Reuben N., Fairbault, Minn. Egg-beater .....	Feb. 12, 1878	407	121	13	304
210, 323	Harrison, Robert W., Baltimore, Md. Dredge-check .....	Nov. 26, 1878	876	258	14	800
205, 263	Harrison, Theophilus, assignor to self, W. C. Buchanan, C. Thompson, and H. W. Harrison, Belleville, Ill. Threshing-machine frame .....	June 25, 1878	903	267	13	1144
201, 345	Harrison, Thomas W., Boston, assignor to self and Henry R. Perkins, Newburyport, Mass. Musical top .....	Mar. 19, 1878	555	170	13	510
203, 678	Harrison, William H., Jamestown, N. Y. Signal-lantern .....	Nov. 5, 1878	156	46	14	702
	Harrison, William M. (See Baughn & Harrison.) .....					
211, 012	Harshberger, Abraham, Philadelphia, Pa. Washing-machine .....	Dec. 17, 1878	708	195	14	931
206, 446	Harshman, Daniel Oliver, Shannon, Ill. Grain-separator .....	July 30, 1878	1137	326	14	169
	Hart, Abram, et al. (See Morrison, George W., assignor.) .....					
206, 105	Hart, Charles E., and Toby Johnson, Lake Lillian, Minn. Combined burglar-alarm and indicator .....	July 16, 1878	708	204	14	107
203, 339	Hart, Daniel B., and William P. Webster, West Mentor, Ohio. Wagon-tongue support .....	May 7, 1878	107	31	13	824
204, 445	Hart, Frank N., assignor of one-half interest to Henry S. Hebard. Grate for open fire-places .....	July 30, 1878	1136	326	14	169
200, 452	Hart, George E., Newark, N. J., assignor to Amasa Mason, New York, N. Y. Embroidering attachments for sewing-machines .....	Feb. 19, 1878	581	171	13	323
209, 670	Hart, George L., and Henry Fisher, Bridgeport, assignor to James D. Frary, New Britain, Conn. Table-cutlery .....	Nov. 5, 1878	157	46	14	702
201, 778	Hart, Gilbert, Detroit, Mich. Emery-wheel .....	Mar. 26, 1878	1007	307	13	579
201, 008	Hart, Horace, Little Valley, N. Y. Burglar-alarm .....	Mar. 5, 1878	186	59	13	444
204, 727	Hart, Hubert C., Unionville, assignor of one-half interest to P. & F. Corbin, New Britain, Conn. Bit-stock .....	June 11, 1878	317	96	13	1060
207, 934	Hart, Hubert C., Unionville, assignor to P. & F. Corbin, New Britain, Conn. Ratchet bit-stock .....	Sept. 10, 1878	409	123	14	404
205, 796	Hart, Ivy Jay, Chandler, Ind. Wagon-jack .....	July 9, 1878	376	108	14	60
201, 080	Hart, James, Spencer, Iowa. Fence .....	Nov. 5, 1878	157	46	14	702
210, 050	Hart, James Glenn, Murray, Ky. Automatic brake for wagons .....	Nov. 19, 1878	549	164	14	761
	Hart, James M., et al. (See McConoghney, Hubert N., assignor.) .....					
201, 779	Hart, Robert R., Odell, Ill. Trace-carrier .....	Mar. 26, 1878	1007	308	13	579
192, 289	Hart, William, Kirksville, Mo. Calculator .....	Jan. 15, 1878	591	173	13	163
211, 013	Hart, William H., jr., Philadelphia, Pa. Neck-tie .....	Dec. 17, 1878	709	196	14	931
200, 057	Hart, William W., assignor to Fred. H. Seymour, Detroit, Mich. Folding-table .....	Feb. 5, 1878	167	54	13	253

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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200, 291	Hart, William Wallace, assignor to Fred. H. Seymour, Detroit, Mich. Folding table	Feb. 12, 1878	408	122	13	304
204, 035	Harter, John H., assignor to Anchor Fork Company, Nevada, Ohio. Horse hay-fork	May 21, 1878	868	248	13	949
201, 111	Hartford, David F., assignor of one-half interest to Thomas T. Hartford, Boston, Mass. Apparatus for grading patterns	Mar. 12, 1878	294	.....	13	467
203, 440	Hartford, David F., assignor to self and Thomas T. Hartford, Boston, Mass. Shears for cutting sheet material	May 7, 1878	228	65	13	851
207, 806	Hartford, David F., assignor of one-half interest to Thomas T. Hartford, Boston, Mass. Tool for cutting out patterns	Sept. 10, 1878	305	93	14	391
	Hartford, Thomas T. (See Hartford, David F., assignor.)					
204, 565	Hartley, James M., and Joseph P. Dickens, Waverly, Iowa. Fence-post	June 4, 1878	133	45	13	1031
207, 517	Hartley, William B., and Peter P. Little, Washington, D. C. Barrel-cover	Aug. 27, 1878	921	271	14	334
8, 231	Hartman, Alexander, Murfreesborough, Tenn., assignor, by mesne assignments, to S. S. White, Philadelphia, Pa. Dental drill	May 14, 1878	623	174	13	910
200, 717	Hartman, Henry, Camp Halleck, Nev. Apparatus for administering medicine to horses	Feb. 26, 1878	871	276	13	389
205, 081	Hartman, John, jr., Philadelphia, Pa. Pipe-wrench	June 18, 1878	704	209	13	1112
205, 744	Hartman, John M., assignor to Taws & Hartman, Philadelphia, Pa. Tuyere	July 9, 1878	317	99	14	52
206, 173	Hartman, John M., Philadelphia, Pa. Valve for regenerative hot-blast stove	July 23, 1878	809	231	14	123
200, 636	Hartman, Samuel, Pittsburg, Pa. Rotary harrow	Feb. 26, 1878	866	238	13	361
207, 677	Same	Sept. 3, 1878	76	23	14	359
198, 885	Hartman, Christian, Hanover, Germany. Buffer for horseshoes	Jan. 1, 1878	167	47	13	34
	Hartman, Louis E. (See Bates & Hartman.)					
	Hartnett, James J. (See Brush & Hartnett.)					
201, 780	Hartnett, Richard William, Philadelphia, Pa. Milling-machine for dressing printers' chases	Mar. 26, 1878	1008	308	13	579
199, 063	Hartshorne, Shreve, Bordentown, N. J. Potato-digger	Jan. 8, 1878	350	161	13	71
205, 264	Hartsock, Hiram Helon, Clear Creek, Ill. Corn-dropper	June 25, 1878	963	267	13	1144
207, 416	Hartwell, Arthur J., Brockport, N. Y. Grain-separator	Aug. 27, 1878	813	241	14	321
201, 607	Harty, William, Jersey City, N. J. Machine for bending elliptic springs	Mar. 26, 1878	840	255	13	554
205, 958	Harvey, Alfred, Scranton, and Milton R. Thurber, Nicholson, Pa. Thill-coupling	July 16, 1878	562	160	14	89
202, 927	Harvey, Edmund A., Wilmington, Del. Machine for straightening sheet-metal	Apr. 2, 1878	166	48	13	623
206, 395	Harvey, George A., Chicago, Ill. Corn-harvester	July 30, 1878	1063	310	14	162
	Harvey, George W. (See Seal, William D., assignor.)					
210, 943	Harvey, George W., and William D. Seal, Washington, D. C. Apparatus for compressing air and forcing beer	Dec. 17, 1878	629	174	14	922
204, 036	Harvey, Hayward A., Orange, N. J. Bolt and nut	May 21, 1878	869	248	13	949
199, 438	Harvey, John. (See Dunn, William, assignor.)					
205, 957	Harvey, Lorenzo Dow, Sheboygan, Wis. Ventilator for windows	Jan. 22, 1878	748	210	13	140
206, 235	Same Window-ventilator	July 16, 1878	561	160	14	89
	Harvey, Moses B., Leavenworth, assignor to Samuel H. Ellis, South Leavenworth, Kans. Compound engine	July 23, 1878	875	250	14	132
209, 759	Harvey, William I., and Henry S. Mitchell, Lock Haven, Pa. Grain-separator	Nov. 12, 1878	252	75	14	719
206, 988	Harvey, William Wallace, Clarksville, Tex. Cotton-cultivator	Sept. 17, 1878	547	163	14	427
	Harway, W. H., et al. (See Scripture, Eliphalet S., assignor.)					
199, 202	Harwell, William Earnest, Starrville, Ga. Band-cutting feeder for thrashing-machines	Jan. 15, 1878	507	149	13	95
	Harwood, J. A., et al. (See Harwood, Nahum, assignor.)					
	Harwood, N., et al. (See Harwood, Nahum, assignor.)					
204, 667	Harwood, Nahum, assignor to J. A. and N. Harwood, Leominster, Mass. Paper chair seat and back	June 11, 1878	251	78	13	1051
205, 083	Hasbrouck, Cyrus L., Syracuse, N. Y. Hinge for awning-blinds	June 18, 1878	706	209	13	1112
207, 806	Hasbrouck, Frederick S., West Brighton, N. Y. Book-binding	Sept. 10, 1878	236	74	14	382
	Haselton, J. S. (See Fitch, Lauren M., assignor.)					
	Haskell, Calvin. (See Reynolds & Haskell.)					
205, 062	Haskell, George W., assignor to self and William H. and Henry J. Haskell, Philadelphia, Pa. Thill-coupling	June 18, 1878	705	209	13	1112
	Haskell, Henry J., et al. (See Haskell, George W., assignor.)					
206, 174	Haskell, William, Chicago, Ill. Pencil-sharpening device	July 23, 1878	810	231	14	123
	Haskell, William H., et al. (See Haskell, George W., assignor.)					
	Haskill, O. C. (See Birge & Skidmore, assignor.)					
204, 728	Haskins, David G., Cambridge, Mass. Double-acting fluid-motor	June 11, 1878	318	97	13	1060
206, 447	Haskins, David Greene, Cambridge, Mass. Life-boat	July 30, 1878	1138	326	14	169
201, 178	Haskins, John F., assignor to Stow Flexible Shaft Company (limited), Philadelphia, Pa. Device for transmitting power	Mar. 12, 1878	359	111	13	476
	Haskins, William A., administrator. (See Haskins, William H.)					
198, 845	Haskins, William H., deceased, by William A. Haskins, administrator, Littleton, N. H. Machine for reducing wood to pulp for paper	Jan. 1, 1878	123	35	13	28
8, 185	Hastings, A. Horace, New York, N. Y., assignor to Paul Guchlin. Upright piano-forte action	Apr. 16, 1878	841	242	13	722
199, 154	Hastings, Azariah Horace, New York, N. Y. Upright piano action	Jan. 15, 1878	460	136	13	87
201, 567	Hastings, Edwin G., Gilman, Iowa. Hay rake and loader	June 4, 1878	134	45	13	1032
207, 867	Hastings, Emory B., Palmer, Mass. Ore-separator	Sept. 10, 1878	365	93	14	391
207, 032	Hastings, Isaac S., and William S. Cook, Florida, Iowa. Gate	Aug. 13, 1878	391	121	14	258
	Hastings, Michael. (See Tregoning & Hastings.)					
201, 009	Hastings, Samuel, Pleasant Valley, N. Y. Platform passenger-register	Mar. 5, 1878	186	60	13	444
201, 414	Hastings, Watson F., Bridgeport, Conn. Bobbin-socket for spindles	Mar. 19, 1878	627	191	13	520
203, 033	Hatch, Albert H., New York, N. Y. Apparatus for embalming	Apr. 30, 1878	1280	370	13	789
	Hatch, Albert T. (See Hatch, Hyman and Albert T.)					
204, 217	Hatch, Augustus T., Cordelia, Cal. Fruit-pitting machine	May 28, 1878	1084	309	13	980
206, 727	Hatch, Ellen D. W., Rolla, Mo. Canceling-stamp	Aug. 6, 1878	72	23	14	215
	Hatch Flexible Sewed Shoe Company. (See Van Wageningen, Albert, assignor.)					
	Hatch, George. (See Hatch, Jonathan, assignor.)					
202, 544	Hatch, George E., assignor to Meriden Flint Glass Company, West Meriden, Conn. Tempering glass	Apr. 16, 1878	745	.....	13	710
199, 200	Hatch, Hyman and Albert T., assignors of one-fourth interest to George B. Hubbard, South Elgin, Ill. Lamp-filler	Jan. 15, 1878	562	173	13	108
205, 745	Hatch, Jesse W., Rochester, N. Y. Lasting boots and shoes	July 9, 1878	318	93	14	53
206, 106	Hatch, Jonathan, South Windham, Conn. Cylinder paper-making machine	July 16, 1878	709	205	14	167
206, 107	Hatch, Jonathan, assignor of one-half interest to George Hatch, South Windham, Conn. Paper-making machine	July 16, 1878	712	205	14	108
	Hatch, Pascal. (See Libby & Hatch.)					
199, 705	Hatfield, Aaron L., Constantine, Mich. Bag-holder	Jan. 29, 1878	1049	306	13	195
210, 606	Hatfield, James Thomas, Hoboken, N. J. Folding and extension bedstead	Dec. 10, 1878	247	68	14	865



## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
202, 816	Hatfield, Oliver P., New York, N. Y. Envelope.....	Apr. 23, 1878	1051	302	13	756
	Hatfield, Vermont. (See Henkel, George H., assignor.)					
209, 168	Hatfield, William F., Elizabeth, N. J. Manufacture of waste-paper baskets.....	Oct. 22, 1878	804	233	14	612
	Hathaway, John C., et al. (See Moffatt, Howard Markus, assignor.)					
207, 352	Hathaway, Samuel, Collins, Ark. Colter.....	Aug. 27, 1878	748	223	14	313
201, 244	Hathaway, William H., Pawtucket, R. I. Manufacturing pin-tongues for jewelry.....	Mar. 12, 1878	431	132	13	486
203, 910	Hatheway, Henry H., Clockville, N. Y. Hop-picking machine.....	May 21, 1878	732	210	13	932
206, 726	Hatler, David Henry, Clifton Park, N. Y. Machine for making horseshoes.....	Aug. 6, 1878	70	22	14	215
210, 529	Hauber, Matthias, Grant City, Mo. Boot and shoe upper.....	Dec. 3, 1878	153	40	14	843
208, 089	Hauerwas, Ludwig, Hartford, Conn. Extension-ladder.....	Sept. 17, 1878	548	164	14	428
204, 729	Haughey, Michael, Saint Louis, Mo. Refrigerator-car.....	June 11, 1878	319	97	13	1060
	Haulenbeck, John H. (See Beatty & Haulenbeck.)					
8, 118	Haumann, August G., Chicago, Ill. Shutter..... (Reissue.)	Mar. 12, 1878	520	159	13	497
209, 259	Haun, Alfred, Pickwick, Pa. Low-water indicator and alarm.....	Oct. 22, 1878	888	250	14	624
203, 034	Haus, Wilson, Church P. O., Pa. Torpedo for oil-wells.....	Apr. 30, 1878	1281	371	13	790
209, 564	Hause, Joseph, Ostrander, Ohio. Horse hay-rake.....	Nov. 5, 1878	32	9	14	685
	Häuser, Joseph W. (See Winchell & Häuser.)					
	Havell, G., et al. (See Havell, George, assignor.)..... (Reissue.)					
8, 051	Havell, George, assignor to Frederick Stevens, James Roberts, and G. Havell, New-ark, N. J. Satchel and traveling-bag handle..... (Reissue.)	Jan. 22, 1878	940	274	13	176
200, 058	Havell, George, assignor to Roberts & Havell, Newark, N. J. Glove-fastening.....	Feb. 5, 1878	168	54	13	239
200, 530	Havell, George, Newark, N. J. Satchel-handle.....	Feb. 19, 1878	657	194	13	350
202, 817	Haven, George S., Racine, Wis. Plow.....	Apr. 23, 1878	1052	302	13	756
208, 680	Same..... same.....	Oct. 8, 1878	241	69	14	529
205, 639	Havenhill, Edwin, assignor of one-half interest to Paul Smith, Joliet, Ill. Barbed fence	July 2, 1878	179	54	14	32
	Havens, Nathaniel. (See Coffman & Havens.)					
190, 155	Havens, Samuel H., Hartford, Conn. Chair for switch-rails.....	Jan. 15, 1878	461	136	13	88
205, 797	Haviland, Edwin Cyril, Sydney, New South Wales. Pencil.....	July 9, 1878	376	108	14	60
210, 688	Haviland, Theodore, New York, N. Y. Case or box for holding cups and saucers.....	Dec. 10, 1878	333	91	14	876
210, 689	Same..... Show-box.....	Dec. 10, 1878	334	91	14	876
	Hawes, Alfred E., et al. (See Wallace, Ferrand G., assignor.)					
204, 970	Hawes, James H., Monroeton, Pa. Toy.....	June 18, 1878	504	173	13	1098
208, 520	Hawes, Loring P., Brooklyn, N. Y. Steam-trap.....	Oct. 1, 1878	64	20	14	498
210, 690	Hawke, Frederick, London, England. Preparing paper to take copies.....	Dec. 10, 1878	335		14	876
205, 860	Hawkes, Albert K., Austin, Tex. Eyeglass.....	July 9, 1878	441	125	14	60
206, 728	Hawkes, Eugene, San Diego, Cal. Pump.....	Aug. 6, 1878	72	23	14	215
210, 691	Same..... Pump-valve.....	Dec. 10, 1878	335	92	14	876
	Hawkes, John. (See Hawkes, Timothy and John.)					
207, 658	Hawkes, Timothy, Jersey City, and John Hawkes, New Brunswick, N. J. Feed-bag.....	Sept. 3, 1878	77	23	14	359
204, 730	Hawkes, Ward W., Malden, Mass. Device for tapping water-pipes.....	June 11, 1878	320	97	13	1060
208, 090	Hawkins, George C., Stewartstown, W. Va. Fruit-picker.....	Sept. 17, 1878	548	164	14	428
201, 010	Hawkins, Henry and Mary, Sedalia, Mo. Medical compound.....	Mar. 5, 1878	188		13	444
	Hawkins, Joel Turnham. (See Rutherford & Hawkins.)					
199, 203	Hawkins, John T., Salisbury, Vt. Gearing for transmission of power.....	Jan. 15, 1878	508	140	13	95
	Hawkins, Mary. (See Hawkins, Henry and Mary.)					
	Hawley, Agnes. (See Hawley, Benjamin R., assignor.)					
203, 147	Hawley, Alfred A., Merrimack, and Robert B. Hawley, Amesbury, assignors to Merino Shoe Company, Merrimack and Boston, Mass. Mechanism for hard-ening or felting hollow articles of wool.....	Apr. 30, 1878	1393	407	13	805
203, 148	Same..... Manufacture of felt foot-coverings.....	Apr. 30, 1878	1394	407	13	805
204, 068	Same..... Mechanism for forming bats for boots, shoes, hats, &c.....	June 11, 1878	252	79	13	1051
209, 242	Hawley, Benjamin R., assignor to Agnes Hawley, Hyde Park, Ill. Heating and ven-tilating houses.....	Oct. 29, 1878	984	284	14	640
	Hawley, Henry Q. (See Anthony, Edmund, assignor.)					
204, 568	Hawley, John W., Warsaw, N. Y. Apparatus for transferring power.....	June 4, 1878	135	45, 46	13	1032
203, 269	Hawley, Melville C., assignor of one-eighth interest to John G. Ross, Saint Louis, Mo. Heating-stove.....	May 7, 1878	34	10, 11	13	825
	Hawley, Robert B. (See Hawley, Alfred A. and Robert B.)					
210, 118	Hawley, Samuel R., Otlin, Ill. Seed-planter.....	Nov. 19, 1878	644	191	14	774
	Hawn, Emanuel R. (See Kendall, Marcus M., assignor.)					
200, 718	Haworth, George A., Liverpool, England. Balanced valve for steam-engines.....	Feb. 26, 1878	872	256	13	390
208, 814	Haworth, George D., Decatur, Ill. Knot for check-row wire.....	Oct. 8, 1878	387	110	14	548
208, 815	Same..... Knot for check-row cord.....	Oct. 8, 1878	387	110	14	548
209, 477	Same..... Guide for check-row wires or cords.....	Oct. 29, 1878	1122	327	14	661
203, 035	Haworth, John, Philadelphia, Pa. Motor for sewing-machines..... (Reissue.)	Apr. 30, 1878	1282	371	13	790
	Haworth, John H., et al. (See Batchelder, Asahel G., assignor.)					
205, 266	Haworth, Lyander L., Decatur, Ill. Anchor for check-row chords.....	June 25, 1878	905	268	13	1144
205, 084	Hawa, Andrew J., Johnstown, Pa. Stopper-sleeve.....	June 18, 1878	707	210	13	1113
205, 383	Hawson, Allen B., and William H. Barnham, York, Mich. Fence-post.....	June 25, 1878	1035	307	13	1160
	Hawthorn, Aldus. (See Hawthorn, John F., assignor.)					
210, 031	Hawthorn, John A., assignor of one-half interest to Aldus Hawthorn, Lancaster, Pa. Vehicle shifting-seat.....	Nov. 19, 1878	550	165	14	761
205, 265	Hawthorn, William A., assignor of one-half interest to H. Hunter, Carson City, Nev. Rail-joint.....	June 25, 1878	904	268	13	1144
	Hay, Gordon. (See Van Buskirk & Hay.)					
	Hay, Isaac. (See Hay, Madison, assignor.)					
198, 801	Hay, John, Ellis, Cal. Harvester and thrasher.....	Jan. 1, 1878	83	22, 23	13	21
198, 938	Hay, John, Junction City, Kans. Automatic fan.....	Jan. 8, 1878	228	64, 65	13	51
205, 483	Hay, Lamar T., Xenia, Ohio. Railway-switch.....	July 2, 1878	20	6, 7	14	11
205, 548	Hay, Madison, Union City, Ind., assignor to Isaac Hay, Darke County, Ohio. Mechan-ism for removing sawdust.....	July 2, 1878	68	25	14	20
	Hay, Samuel F. (See Goodchild & Hay.)					
	Hayden, Daniel W. (See Bean, Charles, assignor.)					
206, 320	Hayden, George W., Worcester, Mass. Drill-chuck.....	July 23, 1878	982	279	14	145
200, 293	Hayden, Henry A., New York, N. Y. Belt for suspending garments.....	Feb. 12, 1878	410	122	13	304
200, 729	Hayden, Hiram W., assignor to Holmes, Booth & Haydens, Waterbury, Conn. Lan-tern.....	Aug. 6, 1878	73	24	14	216
205, 267	Hayden, James S., Cambridge, assignor to Caleb C. Walworth, Boston, Mass. Hose pipe nozzle.....	June 25, 1878	906	268	13	1144
198, 884	Hayden, Joel B., Hempstead, N. Y. Composition for molded articles.....	Jan. 1, 1878	167		13	34
199, 826	Hayden, Nehemiah, Essex, Conn. Lifting-handle.....	Jan. 29, 1878	1162	341	13	213
207, 518	Hayden, Peter, Columbus, Ohio. Fence.....	Aug. 27, 1878	922	261	14	334
207, 519	Same..... Same.....	Aug. 27, 1878	923	272	14	334
	Hayden & Smith. (See Smith, Byron C., assignor.)					
	Hayden, Thomas S., et al. (See Mallett, Francis W., assignor.)					

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200, 292	Hayden, William B., Columbus, Ohio. Trace-carrier.....	Feb. 12, 1878	409	122	13	304
210, 117	Haydock, Sarah A., Ostrander, Ohio. Car-coupling.....	Nov. 19, 1878	643	190	14	774
199, 975	Hayes, Daniel, New Orleans, La. Stowing cotton.....	Feb. 5, 1878	83	27	13	246
202, 169	Hayes, Daniel D., San Francisco, Cal. Extension-ladder.....	Apr. 9, 1878	337	98	13	650
210, 422	Same..... Hose-clamp.....	Dec. 3, 1878	34	8	14	828
206, 236	Hayes, Edwin A., New York, N. Y. Covering for steam-boilers.....	July 23, 1878	877	250	14	132
198, 979	Hayes, George, New York, N. Y. Window-shutter.....	Jan. 8, 1878	269	77	13	57
200, 193	Hayes, George, Girardville, Pa. Miner's squib.....	Feb. 12, 1878	310	92	13	289
	Hayes, James H. (See Hayes, Theodore E. and James H.)					
203, 450	Hayes, Theodore E. and James H., Spring Green, Wis. Vehicle-top.....	May 7, 1878	228	65	13	851
200, 719	Hayes, William H., Salisbury, Mo. Stock-car.....	Feb. 26, 1878	872	256	13	390
202, 170	Hayman, Henry C., Van Buren, Ark. Convertible chair.....	Apr. 9, 1878	338	99	13	651
207, 807	Hayner, George, Lansingburg, N. Y. Shelf attachment for cooking-stoves.....	Sept. 10, 1878	237	75	14	382
207, 033	Haynes, Orville A., Saint Louis, Mo. Oil for slide-valves of locomotives.....	Aug. 13, 1878	392	121	14	258
208, 091	Haynes, Thomas, Kansas City, Mo. Car-axle lubricator.....	Sept. 17, 1878	549	164	14	428
204, 218	Hays, Daniel, Martinsville, Mo. Corn-planter and plow.....	May 28, 1878	1085	309	13	981
	Hays, John C. (See Bowman, William H., assignor.)					
203, 616	Hays, Lafayette A., Greenville, N. H. Saw-filing machine.....	May 14, 1878	410	117	13	884
199, 064	Hayt, David A., Ovid, Mich. Fence-post socket.....	Jan. 8, 1878	351	103	13	71
199, 365	Hayward, Charles E., Attleborough, Mass. Watch-guard tip.....	Jan. 22, 1878	681	200	13	130
202, 723	Hayward, Jacob Lyman, South Framingham, Mass. Nut-lock.....	Apr. 23, 1878	948	271	13	742
199, 706	Hazeltine, Daniel W., Conneaut, Ohio. Carriage-top.....	Jan. 20, 1878	1049	307	13	195
	Hazeltine, Daniel W., Conneaut, Ohio. Carriage-top..... (Reissue.)					
	Hazeltine, Daniel W., Conneaut, Ohio. Carriage-top..... (Reissue.)					
203, 036	Hazen, Reuben W., Fremont, Nebr. Corn-crib ventilator.....	Apr. 30, 1878	1283	371	13	790
199, 156	Hazen, Robert S., sr., Calamus Iowa. Calf-muzzle.....	Jan. 15, 1878	462	136	13	88
210, 530	Same..... Nut-lock.....	Dec. 3, 1878	153	40	14	843
205, 798	Hazen, Sanford, Ripon, Wis. Wind-engine.....	July 9, 1878	377	109	14	60
204, 324	Hazlewood, Greenville, jr., and James Reagin, Bloomfield, Iowa. Trace and hame-tug coupling.....	May 28, 1878	1190	339	13	994
	Heacock, Jay. (See Lunger, William W., assignor.)					
	Heacock, Julia A. (See Kirchner, Gustave A., assignor.)					
	Head, Benjamin F. (See Sanders, Dildine & Head.)					
202, 724	Headler, John H., Brooklyn, N. Y. Baby-walker.....	Apr. 23, 1878	948	271	13	743
210, 692	Header, Napoleon B., Bloomington, Ill. Brick and tile kiln.....	Dec. 10, 1878	336	92	14	876
209, 969	Heald, Daniel Milton, Milford, N. H. Bench-plane.....	Nov. 19, 1878	482	146	14	753
207, 178	Heald, Hiram H., Sandwich, Mass. Machine for cleaning and sifting tacks.....	Aug. 20, 1878	553	166	14	282
200, 453	Heald, John L., Vallejo, Cal. Stop-cock for steam-boilers.....	Feb. 19, 1878	582	172	13	338
	Heald, John Loring. (See Enright & Heald.)					
	Heald, Wallace A. (See Conway & Heald.)					
203, 825	Healey, Thomas M., Washington, D. C. Endless carrying-belt.....	May 21, 1878	643	181	13	920
204, 037	Healy, David, assignor of one-half interest to Benjamin F. Coulter, Charles F. Harper, and Robert S. Moore, Los Angeles, Cal. Waste-trap.....	May 21, 1878	869	249	13	949
200, 138	Heard, L. Allen, Cleveland, Ohio. Gage for indicating the amount of water in oil-cars.....	Feb. 12, 1878	255	77	13	281
201, 245	Hearn, Edwin R., Jersey City, N. J. Package for plug-tobacco.....	Mar. 12, 1878	431	132	13	486
208, 297	Hearne, Frank J., Wheeling, W. Va. Pile for manufacturing nail-plates.....	Sept. 24, 1878	723	212	14	453
210, 531	Hearst, Alexander, and William Dunn, Peoria, Ill. Corn-planter.....	Dec. 3, 1878	154	40	14	843
209, 043	Heartsill, Abram, Louisville, Tenn. Shovel-plow and harrow attachment.....	Oct. 15, 1878	651	188	14	587
	Heasley, Aaron H., et al. (See Lauffer, Simon D., assignor.)					
199, 541	Heath, Eugene A., New York, N. Y. Cuspadore.....	Jan. 22, 1878	857	250	13	158
206, 322	Same..... Spittoon.....	July 23, 1878	984	280	14	145
206, 324	Same..... same.....	July 23, 1878	986	280	14	146
206, 325	Same..... Cuspadore.....	July 23, 1878	987	281	14	146
200, 959	Heath, Frank S., Corry, Pa. Bale-tying machine.....	Feb. 5, 1878	168	55	13	259
	Heath, J. Wilson. (See Beltis & Heath.)					
209, 121	Heaton, Amelia A., Binghamton, N. Y. Clothes-drier.....	Oct. 22, 1878	754	219	14	606
203, 730	Heaton, Horace L., West Jefferson, Ohio. Churn-dasher.....	May 14, 1878	529	150	13	899
204, 325	Same..... Lemon-squeezer and shaker combined.....	May 28, 1878	1191	339	13	994
206, 321	Same..... Combined rope-socket and clamp.....	July 23, 1878	983	280	14	145
199, 827	Heaton, Lewis E., assignor to E. F. Phillips, Providence, R. I. Tip for flexible electric conducting-cords.....	Jan. 20, 1878	1163	342	13	213
203, 617	Heaton, Lewis E., assignor to self and Samuel Barr, Providence, R. I. Ticket-case.....	May 14, 1878	411	117	13	884
209, 681	Heaton, Samuel, Cedar Rapids, Iowa. Iron fence-post.....	Nov. 5, 1878	158	46	14	702
202, 648	Heaton, William, Lee Township, Madison County, Iowa. Shelter for animals.....	Apr. 23, 1878	873	250	13	734
	Heatwole, Martin. (See Weaver & Heatwole.)					
203, 451	Heartner, Floyd, Laramie City, Wyo. Car-coupling.....	May 7, 1878	229	65	13	851
208, 816	Same..... Wind-engine.....	Oct. 8, 1878	388	110	14	518
210, 533	Same..... Clothes-line reel.....	Dec. 3, 1878	155	41	14	843
203, 037	Hebard, Albert K., assignor to Stedman & Morse, Cambridge, Mass. Device for holding coils of wire.....	Apr. 30, 1878	1284	372	13	790
	Hebard, Henry S. (See Hart, Frank N., assignor.)					
201, 112	Hebbon, Herbert, assignor to Lydia Hebbon, Boston, Mass. Process and apparatus for finishing cloth.....	Mar. 12, 1878	297	91	13	467
	Hebbon, Lydia. (See Hebbon, Herbert, assignor.)					
203, 038	Hebbon, William Boston, and Thomas F. Mathews, Malden, Mass. Compound for dressing textile fabrics.....	Apr. 30, 1878	1285	.....	13	790
205, 085	Hobdon, William, Boston, Mass. Cloth-pressing machine.....	June 18, 1878	708	219	13	1113
204, 604	Heberling, John, Iowa City, Iowa. Running-stitch sewing-machine.....	June 4, 1878	177	57	13	1037
203, 540	Hobert, Henry B., Brooklyn, N. Y. Grain drying, scouring, and cleaning apparatus.....	May 14, 1878	339	97	13	875
	Hechler, George L. (See Boote & Hechler.)					
	Heckel, Charles A. (See Clark & Heckel.)					
201, 781	Heckendorn, Henry C., Reading, Pa. Oval-turning lathe.....	Mar. 26, 1878	1009	308	13	579
203, 744	Hecker & Co., George V. (See Hecker, George V., assignor.)					
209, 044	Hecker, George V., assignor to George V. Hecker & Co., New York, N. Y. Package-wrapper.....	Oct. 15, 1878	651	188	14	587
203, 149	Heckman, Adam, Sterling, Ill. Corn-planter.....	Apr. 30, 1878	1295	408	13	805
208, 015	Same..... same.....	Sept. 17, 1878	476	143	14	418
8, 300	Heckmann, Louis Plainville, Mass., assignor of part interest to William H. Wade and Edward P. Davis. Ornamental scroll-work for jewelry..... (Reissue.)	June 25, 1878	1116	.....	13	1172
204, 149	Heckmann, Louis, assignor of two-thirds interest to William H. Wade and Edward P. Davis, Wrentham, Mass. Wire-trimming for jewelry.....	May 28, 1878	1009	287	13	971
	Same..... Bracelet.....	Nov. 19, 1878	645	191	14	774
210, 119	Hedges, Samuel, Wheeling, W. Va. Curtain-fixture.....	Aug. 27, 1878	924	272	14	334
207, 520	Hedges, Thomas, Ernst Möller, and Carl Graff, Hamburg, Germany. Cuff.....	Oct. 8, 1878	390	111	14	548
208, 817	Hedley, Edward E., et al. (See Johnson, Alexander S., assignor.)					

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	Heebner, Josiah D. ( <i>See</i> Hubbard & Heebner.)					
210, 120	Heegaard, Anker. ( <i>See</i> Schröder & Jürgensen, assignors.)	Nov. 19, 1878	645	191	14	774
199, 976	Heegaard, Anker, Copenhagen, Denmark. Smoke-flue					
	Heegaard, Christian August, assignor of one-half interest to Monroe M. Cady, Dubuque, Iowa. Knife cleaner and sharpener	Feb. 5, 1878	84	28	13	246
199, 542	Heeley, James L., Attleborough Falls, Mass., assignor to Davidson Brothers, New York, N. Y. Ornamental chain	Jan. 22, 1878	858	251	13	158
199, 645	Heeren, William E., Pittsburg, Pa. Machine for putting up medical powders	Jan. 29, 1878	989	288	13	186
8, 499	Heery, Luke, Methuen, Mass. Sewing-machine (Reissue)	Nov. 19, 1878	715	213 214	14	784
	Heftt, Christopher. ( <i>See</i> Voth, Sackenreuther & Heftt.)					
	Hefton, A. W. ( <i>See</i> Kersey, John Holland, assignor.)					
207, 737	Height, Harry R., Lebanon, Tenn. Churn	Sept. 3, 1878	155	47, 48	14	369
209, 472	Heilbronner, Samuel, New York, N. Y. Cigar-case	Oct. 29, 1878	1123	328	14	661
207, 354	Heilbrun, Alexander, assignor of one-half interest to Henry Closterman, jr., Cincinnati, Ohio. Permutation-lock	Aug. 27, 1878	749	224	14	313
199, 543	Heimerl, Jacob, Marysville, Cal. Neck-yoke	Jan. 22, 1878	859	251	13	158
203, 039	Heimlich, John, and Louis O. Dehnel, Sandusky, Ohio. Oscillating water-meter	Apr. 30, 1878	1285	372	13	790
210, 032	Heimlich, Peter, Syracuse, N. Y. Oyster-opener	Nov. 19, 1878	551	165	14	762
203, 618	Hein, Charles, Corona, assignor to Hale & Mulford, New York, N. Y. Sleeve-button links	May 14, 1878	412	117	13	884
200, 294	Heine, Hermann, Berlin, Prussia. Sectional steam-generator	Feb. 12, 1878	411	123	13	304
208, 092	Heinen, Christopher, Leavenworth, Kans. Brake-shoe clamp	Sept. 17, 1878	551	165	14	428
209, 565	Heinig, Gustave E., Louisville, Ky. Combined candlestick and match-safe	Nov. 5, 1878	33	9	14	685
198, 740	Heinle, Albert, George, and Robert, Pittsburg, Pa. Nut-lock	Jan. 1, 1878	10	2	13	10
	Heinle, Robert. ( <i>See</i> Heinle, Albert, George, and Robert.)					
208, 238	Heinrich, Hein Heinrich, New York, N. Y. Self-adjusting balance for chronometers	Sept. 24, 1878	724	213	14	453
205, 086	Heintz, John, Boston, Mass. Head-elevator and chin-raiser	June 18, 1878	709	210	13	1113
	Heising, William, et al. ( <i>See</i> Stewart, Edward, assignor.)					
209, 760	Heisler, Charles, Saint Louis, Mo. Combined speaking and signaling apparatus	Nov. 12, 1878	253	75	14	719
	Heisley, John W. ( <i>See</i> Mehling, John A., assignor.)					
202, 725	Heister, Christian, Hanover, Prussia. Double-acting pump	Apr. 23, 1878	949	272	13	743
204, 433	Heister, William C., Springfield, Ohio. Steam pumping-engine	June 4, 1878	18	7	13	1015
201, 782	Helck, John M., Callicoon, N. Y. Pruning-knife	Mar. 26, 1878	1011	309	13	580
210, 121	Held, Gustav, New York, N. Y. Umbrella-cover	Nov. 19, 1878	646	192	14	775
200, 194	Helliker, Martin R., Wauseon, Ohio. Reciprocating churn-dasher	Feb. 12, 1878	311	93	13	289
204, 972	Hellert, Henry J., Frank M. Müller, and Charles A. Meyer, Vincennes, Ind. Bowling-alley	June 18, 1878	596	174	13	1098
	Hellman, Louis. ( <i>See</i> Frary & Hellman.)					
208, 310	Hellman, Louis, Chicago, Ill. Lamp-wick	Sept. 24, 1878	804	234	14	463
200, 195	Helm, J. Henry, Allegheny, Pa. Furnace for link-welding	Feb. 12, 1878	311	93	13	289
200, 196	Same. Machine for forming chain-links	Feb. 12, 1878	313	93	13	289
200, 394	Helm, J. Henry, Allegheny, assignor to Howard Morton, Pittsburg, Pa. Furnace for heating links	Feb. 19, 1878	526	155	13	330
206, 448	Helmecke, Friederich A., Round Top, Tex. Pump	July 30, 1878	1140	327	14	169
208, 311	Same. Guard for sheep-shears	Sept. 24, 1878	804	234	14	463
206, 671	Helms, Charles H., Poughkeepsie, assignor to New York Edge Trimmer Company, New York, N. Y. Sole-edge-trimming machine for boots and shoes	Aug. 6, 1878	13	4, 5	14	298
199, 157	Helwig, Johan, Frankfurt-on-the-Main, Germany. Pressure-gage for steam-boilers	Jan. 15, 1878	463	137	13	88
	Hem, Edward. ( <i>See</i> Tait, Augustus H., jr., assignor.)					
206, 566	Hemchright, Henry, assignor of one-half interest to Edmond Guest, Pottstown, Pa. Nut-lock	July 30, 1878	1268	364	14	185
	Hemenway, Horace P., et al. ( <i>See</i> Elliot, Alfred L., assignor.)					
	Hemingray, William. ( <i>See</i> Rigney & Hemingray.)					
207, 868	Hemje, Charles, New York, N. Y. Tobacco-cutting machine	Sept. 10, 1878	307	93, 94	14	391
208, 975	Hemmingway, Mercer, Owensborough, Ky. Hog-cholera compound	Oct. 15, 1878	574	111	14	576
8, 321	Hempel, Henry A., assignor to Joseph A. Dingens and Magdalena Hempel, Buffalo, N. Y. Printer's furniture (Reissue)	July 9, 1878	531	152	14	80
204, 820	Hempel, Henry A., assignor of one-half interest to Joseph A. Dingens, Buffalo, N. Y. Printer's quoin	June 11, 1878	415	122	13	1071
	Hempel, Magdalena, et al. ( <i>See</i> Hempel, Henry A., assignor) (Reissue.)					
208, 818	Hempstead, Beall, Little Rock, Ark. Lamp-burner	Oct. 8, 1878	390	111	14	548
200, 830	Hénard, Charles, and Etienne Lasnier, Paris, France. Cosmographic clock	Mar. 5, 1878	16	6, 7	13	417
204, 569	Henderson, David E., Lectown, W. Va. Mortising-machine	June 4, 1878	137	46	13	1062
203, 620	Henderson, Edward, New York, N. Y. Mold-holder for gold-leaf cutters	May 14, 1878	414	118	13	885
204, 435	Henderson, George W., Unity, Wis. Vehicle-axle	June 4, 1878	20	7	13	1015
206, 017	Henderson, Simson Sturgen, North Washington, assignor to self and John W. Wenner, Forest, Ohio. Tobacco-quid protector	July 16, 1878	619	178	14	96
202, 171	Henderson, Thomas Alexander, Natchez, Miss. Reciprocating steam-engine	Apr. 9, 1878	339	99	13	651
205, 861	Henderson, William, East Cambridge, Mass. Valve	July 9, 1878	442	125	14	69
	Henderson, William H. ( <i>See</i> Redmond, Charles Clawson, assignor.)					
206, 016	Henderson, William H., San José, Cal. Safety-hook for harness-saddle	July 16, 1878	618	178	14	96
206, 449	Henderson, William Jackson, assignor to self and William H. McKey, Valdosta, Ga. Machine for operating rice-beaters, churns, &c	July 30, 1878	1141	327	14	169
	Hendrick, Augustus D. ( <i>See</i> Bryant & Hendrick.)					
210, 324	Hendrick, Eli E., Carbondale, Pa. Iron tank for holding petroleum	Nov. 26, 1878	877	258	14	809
201, 783	Hendricks, Adam C., Duffield's, W. Va. Vehicle-wheel	Mar. 26, 1878	1011	309	13	580
	Hendrickson, H. O. ( <i>See</i> Wing, Lewis T. Larson, assignor.)					
	Hendrickson, Mary W., et al. ( <i>See</i> Scripture, Eliphail S., assignor.)					
	Hendrickson, Stephen C., et al. ( <i>See</i> Pope, Frank L., assignor) (Reissue.)					
199, 977	Hendrickson, Stephen C., Brooklyn, N. Y. Electric signaling apparatus for railway-switches	Feb. 5, 1878	85	28	13	246
	Hendrie, Charles F. ( <i>See</i> Bolthoff, Henry, assignor.)					
202, 726	Hendry, John C., Boston, Mass. Hub-attaching device	Apr. 23, 1878	949	272	13	743
203, 911	Same. Same	May 21, 1878	753	210	13	132
198, 846	Hendryx, Andrew B., assignor to A. B. Hendryx & Co., Ansonia, Conn. Bird-cage feed-cup holder	Jan. 1, 1878	124	36	13	28
	Hendryx & Co., A. B. ( <i>See</i> Hendryx, Andrew B., assignor.)					
207, 808	Henigst, William, Columbus, Ohio. Cultivator	Sept. 10, 1878	238	75	14	382
203, 541	Henkel, George H., assignor of one-half interest to Vermont Hatfield, Middletown, Ohio. Cooking utensil	May 14, 1878	340	97	13	875
200, 720	Henkell, August, Yonkers, N. Y. Safety-halter	Feb. 26, 1878	874	257	13	390
203, 619	Henley, William T., Plaistow, England. Submarine telegraph-cable	May 14, 1878	413	118	13	885
205, 549	Hennessey, Thomas, and Michael H. Dorgan, San Francisco, Cal. Valve for basins	July 2, 1878	89	25	14	20
209, 479	Henning, Abel, Belleville, N. J. Carbureting-machine	Oct. 29, 1878	1124	328	14	661

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dist.	Vol.	Page.
205, 208	Henning, Amandus, New York, assignor of one-half interest to Daniel S. De Vinne, Brooklyn, N. Y. Stereotype-block	June 25, 1878	907	268	13	1144
209, 761	Henning, George C., Washington, D. C. Hand-rest	Nov. 12, 1878	254	76	14	719
204, 638	Henning, William B., Waterloo, Ind. Under-drain	May 21, 1878	870	249	13	950
206, 018	Henrich, Carl L., San Francisco, Cal. Apparatus for transmitting power and motion	July 10, 1878	620	179	14	90
203, 040	Henrich, Heinrich, assignor to Rosa Henrich, New York, N. Y. Die for forming settings for lockets	Apr. 30, 1878	1287	372	13	790
201, 524	Henrich, Rosa. (See Henrich, Heinrich, assignor.)					
208, 173	Henry, Alexander, and Daniel Fraser; said Fraser assignor to said Henry, Edinburgh, North Britain. Fire-arm	Mar. 19, 1878	724	224	13	536
202, 028	Henry, Benjamin F., near Miami, assignor to self and William E. Young, Saline County, Mo. Baking-pen and cover	Sept. 17, 1878	645	189	14	440
202, 028	Henry, John S., North Belle Vernon, Pa. Curtain-roller and bracket	Apr. 2, 1878	167	48	13	623
206, 730	Henry, John William, Jamestown, Ind. Trunk	Aug. 6, 1878	74	24	14	216
208, 093	Henschel, Morris, New York, N. Y. Scarf	Sept. 17, 1878	561	165	14	428
211, 014	Hensel, Louis, assignor of one-half interest to August Krefter, Berlin, Prussia. Milk-boiler	Dec. 17, 1878	710	196	14	931
208, 976	Henshaw, John Scott, Goshen, Ky. Gate	Oct. 15, 1878	574	167	14	577
8, 511	Henthorn, John T., Providence, R. I., and Barton D. Thayer, New York, N. Y., assignors, by mesne assignments, to American Ship Windlass Company, Providence, R. I. Capstan	Dec. 3, 1878	224	59	14	853
201, 246	Hentschel, August, Cincinnati, Ohio. Sofa-bedstead	Mar. 12, 1878	432	133	13	486
190, 707	Henzel, Nicolaus, Prag, and Paul Wilhelm Liebig, Teplitz, Austria. Grate-bar for furnace	Jan. 29, 1878	1050	307	13	196
200, 295	Herbert, Cornelius Thomas. (See Herbert, William and Cornelius Thomas.)					
208, 239	Herbert, William and Cornelius Thomas, Irving Park, Ill. Corn and potato coverer	Feb. 12, 1878	413	123	13	304
203, 270	Herchelrode, John W., Dayton, Ohio. Circular metal proof-staff for testing mill-stones	Sept. 24, 1878	726	213	14	453
202, 727	Herlt, Hermann, New York, N. Y. Curtain-fixture	May 7, 1878	30	11	13	825
210, 852	Herman, Charles Vergel. (See Herman, John M., Frederick W., and Charles Vergel.)					
206, 731	Herman, Frederick W. (See Herman, John M., Frederick W., and Charles Vergel.)					
207, 034	Herman, John M., Frederick W., and Charles Vergel, Lincoln Centre, Kans. Grain-separator	Apr. 23, 1878	950	272	13	743
202, 345	Hernance, Robert, Fort Miller, N. Y. Car-starter	Dec. 17, 1878	513	145	14	908
200, 682	Hermann, Julius, Campbellsport, Wis. Spring bed-bottom	Aug. 6, 1878	75	24	14	216
203, 041	Hermann, Max, Troy, assignor of one-half interest to James K. P. Pine, Lansingburg, N. Y. Collar	Aug. 13, 1878	393	121	14	259
203, 440	Hernstein, Albert L., New York, N. Y. Saddle-bag	Apr. 16, 1878	533	156	13	682
200, 682	Herold, Hieronymus, et al. (See Hübel, Henry, assignor.)					
203, 041	Herold, Julius, et al. (See Hübel, Henry, assignor.)					
203, 440	Heron, Christopher, Galena, Ill. Shoe	Nov. 5, 1878	159	47	14	702
199, 544	Herr, Abraham K., Lampeter, Pa. Tuyere	Apr. 30, 1878	1288	373	13	790
201, 669	Same. Fan-blower machine	May 7, 1878	108	32	13	835
206, 876	Herrburger, Joseph. (See Schwarzer & Herrburger.)					
210, 038	Herrhoff, Nathaniel G., Providence, R. I. Regulator for steam-engines	Jan. 22, 1878	859	251	13	158
203, 841	Herrif, Jonas Hartzel, City Bluff, Mo. Car-coupling	Mar. 26, 1878	896	273	13	563
200, 531	Herring, Anaxamander, Cohoes, N. Y. Railway-track	Aug. 13, 1878	240	76	14	240
202, 029	Herring & Co. (See Weimar, Jacob, assignor.)					
206, 785	Herriott, Ephraim, Brimfield, and George S. Smith, Elmwood, Ill. Corn-sheller separator	Nov. 19, 1878	552	165	14	762
200, 721	Herrmann, Adolph T., and William Sexton, San José, Cal. Construction of wooden sewers	May 7, 1878	109	32	13	835
198, 039	Herrmann, Richard. (See Jochum & Herrmann.)					
208, 174	Herrmann, William, Cotton Plant, Mo. Cotton-cleaner	Feb. 26, 1878	874	257	13	300
204, 326	Herron, Hiram C., Cleveland, Ohio. Water-dam	Jan. 8, 1878	229	65	13	51
199, 708	Hersey, Edmund, Hingham, Mass. Portable water-heater	Sept. 17, 1878	645	189	14	440
206, 785	Hersey, Randolph, et al. (See Clapp, George P., assignor.)					
200, 531	Hershey, William B. C., Columbus, Ohio. Corner-iron for carriage-seats	May 28, 1878	1192	339	13	994
202, 029	Hersman, George. (See Hersman, Michael M. and George.)					
206, 785	Hersman, Michael M. and George, Hersman, Ill. Metallic burial-case	Jan. 29, 1878	1051	307	13	196
208, 016	Hersome, Calvin, Boston, Mass. Buckle	Aug. 6, 1878	134	42	14	223
200, 531	Herzberg, Nettie. (See O'Neill, Henry, assignor.)					
200, 722	Herzfeldt, Carl, jr., assignor of one-half interest to Carl Herzfeldt, sr., Chicago, Ill. Spring air-gun	Sept. 17, 1878	477	143	14	418
201, 784	Hess, Benjamin B., Burlington, Iowa. Revolving churn	Feb. 19, 1878	658	194	13	350
210, 036	Hess, Daniel, Evansville, Ind. Grinding-mill	Feb. 26, 1878	875	257	13	390
202, 029	Same. same	Mar. 26, 1878	1012	309	13	580
204, 030	Same. Vertical-disk grinding-mill	Dec. 17, 1878	622	173	14	921
206, 730	Hess, G. H. (See Ritchel, Charles F., assignor.)					
200, 326	Hess, George H., Winchester, Va. Rein-holder	Apr. 2, 1878	108	49	13	623
210, 122	Hess, George H., Chicago, Ill., assignor to Louisa H. Hess, Grand Rapids, Mich. Fire-place	July 23, 1878	988	281	14	146
204, 030	Hess, Jacob F., Massillon, Ohio. Pump	Nov. 19, 1878	647	192	14	775
204, 030	Hess, Louisa H. (See Hess, George H., assignor.)					
204, 030	Hess, William L., and Lester W. Newton, Belle Plaine, Iowa. Washing-machine	May 21, 1878	871	240	13	950
200, 206	Hess, William L., Belle Plaine, Iowa. Stove-pipe shelf	June 4, 1878	138	46	13	1033
203, 452	Hesse, Ernst A. C., assignor to self and John H. C. Lange, Brooklyn, N. Y. Rocking-chair	Feb. 12, 1878	414	123	13	305
202, 818	Hesse, Ludwig Julius, St. Petersburg, Russia. Agricultural building	May 7, 1878	230	65	13	852
207, 869	Hesse, Oscar, West Hoboken, N. J. Fishing apparatus	Apr. 23, 1878	1053	302	13	756
201, 415	Hessels, Anthony, New York, N. Y. Ear-ring cover	Sept. 10, 1878	308	94	14	391
206, 567	Hester, James, Knoxville, Ill. Outside window-blind	Mar. 19, 1878	627	192	13	520
202, 437	Hesthal, August, San Francisco, Cal. Glove	July 30, 1878	1268	364	14	185
208, 595	Heston, William, Akron, Ohio. Whiffletree-hook	Apr. 16, 1878	624	183	13	695
200, 532	Hetherington, John E., Cherry Valley, N. Y. Artificial honey-comb foundation	Oct. 1, 1878	142	41	14	508
200, 480	Hevener, Samuel, Blairstown, Iowa. Harvester	Feb. 19, 1878	659	194	13	250
200, 480	Hevener, George E. (See Hevener, Peter, assignor.)					
203, 450	Hevener, Peter, assignor to George E. Hevener, Philadelphia, Pa. Railway system	Oct. 29, 1878	1126	328	14	602
201, 670	Hewitt, Henry Eli, Georgetown, Ill. Vegetable-cutter	May 7, 1878	231	66	13	852
199, 646	Hewitt, Horace L., Alton, Ill., assignor of one-half interest to L. M. and M. Rumsey, Saint Louis, Mo. Sulky-plow	Mar. 26, 1878	897	273	13	563
	Hewitt, Jackson W. and Willis J. Jackson, Mich. Carriage-spring	Jan. 29, 1878	993	289	13	187
	Hewitt, John, et al. (See Farley, Henry W., assignor.)					
	Hewitt, John. (See Smith & Hewitt.)					

*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
199, 709	Hewitt, John S., Wheatland, Mo. Rotary steam-engine.....	Jan. 20, 1878	1052	307	13	196
204, 327	Hewitt, Manlius, Saint Louis, Mo., assignor to Seymour Manufacturing Company, Seymour, Ind. Scythe-snath fastening.....	May 28, 1878	1193	340	13	994
207, 179	Hewitt, S. Myron. (See Brigham, Hewitt & Prusha.) Hewitt, Silas, Seneca Falls, N. Y. Car-brake.....	Aug. 20, 1878	554	106	14	282
204, 040	Hewitt, Willis J. (See Hewitt, Jackson W. and Willis J.) Hewlett, Spencer H., Saint Louis, Mo. Cigar-box.....	May 21, 1878	871	249	13	950
203, 596	Heyenga, William, New York, N. Y. Tobacco-pipe cover.....	Oct. 1, 1878	142	41	14	508
208, 597	Same..... Tobacco-pipe.....	Oct. 1, 1878	143	42	14	508
8, 020	Heyl, Henry R., and August Brehmer, Philadelphia, Pa., assignors to Novelty Paper Box Company. Paper-box machine..... (Reissue.)	Jan. 1, 1878	206	58, 59	13	40
207, 809	Heyn, William, San Francisco, Cal. Steadying-gage and glass-tube cutter.....	Sept. 10, 1878	241	75	14	343
206, 786	Heysinger, Isaac W., Philadelphia, Pa. Fountain-pen.....	Aug. 6, 1878	135	42	14	223
210, 325	Heywood Brothers & Co. et al. (See Nichols, John, assignor.) Heywood, John R., Boston, Mass. Oven.....	Nov. 26, 1878	877	258	14	809
201, 608	Heywood, William F., Woonsocket, R. I. Distance-register for vehicles.....	Mar. 26, 1878	841	255	13	554
209, 122	Hibbard, Zebina M., Freeport, Ill. Station-indicator.....	Oct. 22, 1878	755	219	14	606
208, 598	Hibbert, John, Camden, N. J., assignor to self, Joseph Plant, and William H. Beswick. Doffer-comb for carding-engines.....	Oct. 1, 1878	144	42	14	508
201, 671	Hibbert, Thomas, Cochran, Ind. Car-axle-box lid.....	Mar. 26, 1878	898	274	13	563
	Hibbs, John R. (See Spaulding & Hibbs.) Hibner, John N., et al. (See Harding, Edward S., assignor.) Hibner, Joseph, et al. (See Harding, Edward S., assignor.)					
203, 454	Hickey, John, Sheboygan, Wis. Steam-brake for locomotives.....	May 7, 1878	232	66	13	852
199, 545	Hickey, Thomas J., Philadelphia, Pa. Vehicle-seat.....	Jan. 22, 1878	861	251	13	158
206, 723	Hickley, Arthur Samuel, London, England. Magneto-electric fire-alarm and signaling apparatus.....	Feb. 26, 1878	876	257	13	390
206, 175	Hickman, Edwin W., Lake, Wis. Fire-proof roofing composition.....	July 23, 1878	811		14	123
204, 669	Hickox, George S., Marshalltown, Iowa. Prisoner's shackle.....	June 11, 1878	253	79	13	1051
209, 197	Hicks, Alonzo, assignor to self, Mason S. Seymour, and George W. Quackenbush, Flushing, N. Y. Preparing feathers for bedding.....	Feb. 12, 1878	314	94	13	290
206, 176	Hicks, Bohn Chapin, Rose Township, Ramsey County, Minn. Road-engine.....	July 23, 1878	811	{ 231 232 }	14	123
	Hicks, Edwin A., et al. (See Palmer, Charles, assignor.) Hicks, James M., Summit, N. J. Burner for fuel.....	Feb. 12, 1878	257	77	13	281
208, 312	Hicks, Reuben P., Omro, Wis. Wagon-seat corner.....	Sept. 24, 1878	805	235	14	463
201, 011	Hicks, William H., Brooklyn, N. Y. Bottle-stopper.....	Mar. 5, 1878	189	60	13	444
8, 273	Hicks, William S., New York, N. Y. Watch-chain bar..... (Reissue.)	June 4, 1878	226	72	13	1044
209, 890	Hien, Phillip, assignor to Sarah Hien and Basil D. Buford, Rock Island, Ill. Platform for railway-cars.....	Nov. 12, 1878	385	115	14	736
	Hien, Saml, et al. (See Hien, Phillip, assignor.) Hiestand, Henry, jr., Vincent, Pa. Wagon-jack.....	Aug. 13, 1878	309	94	14	248
206, 944	Higinbotham, Charles T., assignor to Hampden Watch Company, Springfield, Mass. Winding-click for watches.....	May 28, 1878	1009	287	13	971
204, 150	Higgins, Campbell P., East Line, N. Y. Potato-digger.....	July 30, 1878	1269	365	14	185
206, 508	Higgins, Charles J., Hallowell, Me. Convertible chair.....	July 30, 1878	1142	327	14	169
206, 450	Higgins & Co., E. S. (See Duckworth, John C., assignor.) Higgins, Edward O., Fairhaven, Mass. Machine for punching sheet-metal tubing.....	Feb. 19, 1878	583	172	13	338
209, 454	Higgins, Frank, Wellsville, N. Y. Whip-socket.....	Aug. 13, 1878	310	94	14	248
210, 034	Higgins, Henry M. (See McDonough, Hubert N., assignor.) Higgins, Jerome Sillman, and Riverious Thornton, California, Mo. Water-aerator.....	Nov. 19, 1878	553	165	14	762
203, 271	Higgins, Michael. (See Doherty, William Alexander, assignor.) Higgins, Milton P., Worcester, Mass. Hydraulic elevator.....	May 7, 1878	37	11	13	825
	Higgins, Riverious Thornton. (See Higgins, Jerome Sillman, and Riverious Thornton.) Higgins, Rozander S., Neoga, Ill. Riding-plow.....	Aug. 6, 1878	76	24	14	216
206, 732	Higgins, Welter C., Norwich, Conn. Soap-dish for iron sinks.....	Sept. 17, 1878	552	165	14	428
205, 269	Higginson, Charles M., Chicago, Ill. Car-spring.....	June 25, 1878	907	269	13	1144
210, 255	Higgs, Joseph Willelm, Sharon, Pa. Hay-elevator.....	Nov. 26, 1878	801	238	14	799
207, 965	Higham, Enos T., assignor of one-half interest to Howard H. Higham, Philadelphia, Pa. Curtain-roller and bracket.....	Sept. 10, 1878	410	124	14	404
	Higham, Howard H. (See Higham, Enos T., assignor.) Highland Fountain Company. (See Simpson, Robert, assignor.)..... (Reissue.)					
8, 381	Higley, Aaron, assignor to Higley Car Journal Company, Cleveland, Ohio. Car-truck..... (Reissue.)	Aug. 20, 1878	718	215	14	304
201, 179	Higley Car Journal Company. (See Higley, Aaron, assignor.)..... (Reissue.) Higley, Eben N., Somersworth, N. H. Velocipede.....	Mar. 12, 1878	360	111	13	476
204, 572	Hildebrand, Henrietta. (See Birge & Williams, assignors.) Hildenbrand, George F., and Peter J. Eckes, New York, N. Y. Button-hole attachment for sewing-machines.....	June 4, 1878	139	47	13	1032
201, 012	Hildreth, Edwin A. (See Burt & Hildreth.) Hildreth, Edwin A., Harvard, Mass. Lawn-mower.....	Mar. 5, 1878	189	60, 61	13	444
203, 550	Same..... Machine for splitting wood.....	July 2, 1878	90	25, 26	14	20
201, 526	Hildreth, Henry P., et al. (See Nye, Charles H., assignor.) Hildreth, Joseph W., Boston, Mass. Leather-stuffing machine.....	Mar. 19, 1878	736	{ 225 225 }	13	536
208, 599	Hildrup, William T., and Albert Tachop, Harrisburg, Pa. Seed-drill.....	Oct. 1, 1878	145	42	14	508
208, 819	Hilgers, Jacob, Rheinbrohl, Prussia, Germany. Metallic roof-tile.....	Oct. 8, 1878	391	111	14	548
204, 731	Hill, Addison P. (See Driver, Luna, Sanders & Hill.) Hill, Alfred C., et al. (See Proctor, David R., assignor.) Hill, Alva T., assignor to self and Edward J. Smith, Detroit, Mich. Nut-lock.....	June 11, 1878	321	97	13	1060
207, 966	Hill, Andrew L., assignor of one-half interest to Felix B. Tait and George R. Brett, Decatur, Ill. Snout-ring.....	Sept. 10, 1878	411	124	14	404
203, 914	Hill, Benjamin B., Springfield, Mass. Hand canceling-stamp.....	May 21, 1878	735	211	13	933
203, 915	Same..... Hand-stamp.....	May 21, 1878	736	211	13	933
208, 240	Hill, Charles F., Hazleton, Pa. Suspensory-bandage.....	Sept. 24, 1878	726	213	14	453
209, 045	Hill, Charles G., Arlington, assignor to John Selby, Baltimore, Md. Machine for making plaster bandages.....	Oct. 15, 1878	653	188	14	587
210, 200	Hill, Christian C., Rockford, Ill. Machine for cutting escutcheons.....	Nov. 26, 1878	745	221	14	791
207, 417	Hill, Daniel C., Red Wing, Minn. Butter-package.....	Aug. 27, 1878	815	241	14	821
204, 571	Hill, Edwin H., Worcester, Mass. Apparatus for finishing zinc-coated wire.....	June 4, 1878	138	40	13	1032
208, 734	Same..... Annealing furnace.....	Oct. 8, 1878	296	85	14	536
202, 438	Hill, Emily A., Princeton, Ind. Ironing-table.....	Apr. 16, 1878	624	183	13	685
199, 546	Hill, George B., assignor to Michigan Bolt and Nut Works, Detroit, Mich. Machine for cutting and punching nut-blanks.....	Jan. 22, 1878	861	252	13	158



## Alphabetical list of patents for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. E.	Vol.	Page.
201, 525	Hill, George C., assignor of one-half interest to Charles W. Stiles, Salisbury, Md. Corpe-cooler .....	Mar. 19, 1878	735	224	13	536
	Hill, George J. (See Moss, Smith & Hill.) .....					
	Hill, George R., et al. (See Coles, Erskine A., assignor.) .....					
205, 960	Hill, H. Harrison, Chicago, Ill. Arithmetical block .....	July 16, 1878	564	101	14	89
204, 221	Hill, Harvey N., Pontiac, Mich. Wind-engine .....	May 28, 1878	1088	310	13	981
206, 733	Hill, Henry H., Moline, Ill. Wrench .....	Aug. 6, 1878	76	25	14	216
208, 314	Hill, Hiram H., and Frank Moorlen, Augusta, Me. Steam fire-engine .....	Sept. 24, 1878	806	235	14	463
	Hill, Hugh W. (See Housum & Hill.) .....					
203, 042	Hill, Hugh W., Decatur, Ill. Machine for opening ditches .....	Apr. 30, 1878	1289	373	13	790
203, 272	Same. Hog-ringing implement .....	May 7, 1878	38	12	13	825
	Hill, Isaac, et al. (See Mann, William, assignor.) .....					
204, 220	Hill, James, Providence, R. I. Cotton-roving can .....	May 28, 1878	1087	310	13	981
204, 971	Hill, James, Providence, R. I. Bottom for cotton-cans .....	June 18, 1878	595	174	13	1008
8, 306	Hill, James H., and William H. Jayne, Boone, Iowa, assignors, by me no assignments, to said Jayne, Thomas B. Moore, Jeremiah E. Black, and John E. Ingersoll. Wire-barbing tools. (Reissue) .....	June 25, 1878	1122	331	13	1172
199, 547	Hill, James M., Ciske, Ill. Churn .....	Jan. 22, 1878	862	252	13	159
205, 384	Hill, James M., Ann Arbor, Mich. Hay-tedder .....	June 25, 1878	1035	307	13	100
205, 863	Same. Steam feed-cooker .....	July 9, 1878	444	126	14	69
	Hill, John, et al. (See Hill, Nathan, assignor.) .....					
205, 862	Hill, John, Columbus, Ga. Copying-press .....	July 9, 1878	443	126	14	69
	Hill, John Sias. (See Hill, Varnum P. and John Sias.) .....					
203, 913	Hill, Jonathan, New York, N. Y. Twine-holder .....	May 21, 1878	734	211	13	933
207, 274	Hill, Jonathan, Franklin, Ind. Gate .....	Aug. 20, 1878	655	194	14	275
202, 943	Hill, Joseph, Williamsport, Pa. Buttoner .....	Apr. 30, 1878	1104	345	13	798
	Hill, Lysander, et al. (See Baker, Joseph, assignor.) .....					
203, 731	Hill, Martin V. B., assignor to Winchester Repeating Arms Company, New Haven, Conn. Cartridge-loading machine .....	May 14, 1878	520	150 151	13	899
200, 792	Hill, Nathan, assignor to John K. Divers, Clyde Township, Allegan County, John Hill, Grand Rapids, and William B. Tripp, Bangor, Mich. Lifting-jack .....	Feb. 26, 1878	939	277	13	401
202, 649	Hill, Nathan, Bravo, assignor of three-fourths interest to John K. Divers, Clyde, and William B. Tripp, Bangor, Mich. Whiffletree-hook .....	Apr. 23, 1878	875	251	13	734
210, 693	Hill, Richard H., New Haven, Conn. Safety attachment for elevators .....	Dec. 10, 1878	337	92	14	876
209, 260	Hill, Rowland F., New York, N. Y. Smoke and spark conveyer .....	Oct. 22, 1878	889	259 260	14	624
209, 394	Hill, Russell S., assignor of one-half interest to Jehu P. Randall, Maquon, Ill. Wall-paper trimmer .....	Oct. 29, 1878	1037	301	14	648
	Hill, Samuel. (See Cook & Hill.) .....					
201, 672	Hill, Samuel, San Francisco, Cal. Pencil-holder .....	Mar. 26, 1878	899	274	13	563
204, 219	Same. Sewing-machine table .....	May 28, 1878	1086	309	13	981
207, 738	Hill, Samuel, and Benjamin B. Prentice, Greensborough, Vt. Milk-cooler .....	Sept. 3, 1878	157	48	14	369
208, 095	Hill, Seth, Trumbull, Conn. Anti-friction journal-bearing .....	Sept. 17, 1878	552	165	14	428
201, 609	Hill, Thomas M., Dayton, Ohio. Combined sieve and strainer .....	Mar. 26, 1878	842	235	13	554
205, 087	Hill, Timothy, Fairfield Township, Crawford County, Pa. Stove-pipe shelf .....	June 18, 1878	710	210	13	1113
206, 108	Hill, Varnum P., Hannibal, and John Sias Hill, Moira, N. Y. Milk-cooling apparatus .....	July 16, 1878	714	206	14	108
	Hill, Wallace C. (See Altenburg & Hill.) .....					
	Hill, Warren S. (See Lane & Hill.) .....					
201, 247	Hill, William, Newark, N. J. Boot and shoe heel .....	Mar. 12, 1878	433	133	13	486
201, 921	Hill, William King, Brush Creek, Iowa. Feed-steamer .....	Apr. 2, 1878	63	17	13	608
203, 621	Hill, William, Sennett, N. Y. Clothes-wringer .....	May 14, 1878	414	118	13	885
	Hillard, James P. (See Hackley, John, assignor.) .....					
201, 180	Hillard, Paul H., Middle Haddam, Conn. Bell-toy .....	Mar. 12, 1878	361	111	13	476
206, 327	Hillebrand, Louis, assignor of one-half interest to Daniel Wolf, Philadelphia, Pa. Pad-lock .....	July 23, 1878	989	281	14	146
203, 043	Hillebrand, George, Philadelphia, Pa. Lamp-burner .....	Apr. 30, 1878	1289	373	13	790
202, 650	Hillen, George, and John Crockett, New York, N. Y. Electro-magnetic printing apparatus .....	Apr. 23, 1878	876	251	13	734
207, 180	Hilliard, Samuel E., Reno, Nev. Railway-rail joint .....	Aug. 20, 1878	555	166	14	282
	Hills Archimedian Lawn Mower Company. (See Shaw, John, assignor) .. (Reissue) ..					
204, 328	Hills, Dwight B. (See Hills, George and Dwight B.) .....					
	Hills, George and Dwight B., Plainville, Conn. Clock-case .....	May 28, 1878	1193	340	13	994
	Hills, Henry Milton. (See Clemmons & Hills.) .....					
208, 313	Hills, Jacob, Haydensville, Mass. Stop-cock .....	Sept. 24, 1878	805	235	14	463
203, 912	Hills, James H., Burlington, Vt. Car-coupling .....	May 21, 1878	733	210	13	933
208, 241	Hills, Winfield Scott, Boone, Iowa. Smut-machine .....	Sept. 24, 1878	727	213	14	454
202, 259	Hilton, Albert M. (See Shollar, Frank, assignor.) .....					
	Hilton, Charles William, Bacon Hill, assignor of one-half interest to J. Howard Thompson, Northumberland, N. Y. Wrench .....	Apr. 9, 1878	425	124	13	663
8, 194	Himmer, Vitalis, New York, N. Y. Pendulum-clock .....	Apr. 23, 1878	1160	333	13	769
209, 616	Same. Striking-clock .....	Nov. 5, 1878	86	26	14	692
209, 046	Himrod, William G., Easton, Md. Combined plow and harrow .....	Oct. 15, 1878	654	189	14	587
201, 673	Hinaman, Louis H., Long Eddy, N. Y. Vehicle-axle lubricator .....	Mar. 28, 1878	890	275	13	563
209, 261	Hinchliffe, William, Nashville, Tenn. Door-securer .....	Oct. 22, 1878	890	260	14	625
8, 099	Hinckel, Frederick, assignor to Edwin D. Brainard, Albany, N. Y. Washing shavings in breweries .. (Reissue) ..	Feb. 26, 1878	963	284	13	404
	Hinckle, John A. (See Shirley, John R., assignor.) .....					
209, 891	Hinds, Charles H., New York, N. Y. Electric gas-burner .....	Nov. 12, 1878	886	115	14	736
204, 019	Hinds, Franklin P., assignor of one-half interest to David Whittemore, Quincy, Mass. Hand lasting-tool for boots and shoes .....	July 16, 1878	620	179 180	14	96
198, 980	Hine, Adelbert P., Wolcottville, Conn. Machine for drying and scouring sheet-metal ..	Jan. 8, 1878	270	78	13	57
210, 604	Hine, Merritt, assignor to Union Nut Company, Unionville, Conn. Die for forging carriage-clips .....	Dec. 10, 1878	338	92	14	876
	Hines, Christian L. (See Greget, Louis, assignor.) .....					
206, 328	Hines, Henry K., Philadelphia, Pa. Handle for soldering-iron .....	July 23, 1878	990	281	14	146
204, 787	Hinkle, Charles, Winfield, Iowa. Fire-escape .....	Aug. 6, 1878	137	42	14	223
	Hinkle, George W. (See Van Buren, George W., Jr., assignor.) .....					
200, 911	Hinkle, Milton Washington, Memphis, Tenn. Adding-machine .....	Mar. 5, 1878	92	32	13	429
204, 821	Hinkle, Philip, San Francisco, Cal. Hatch for street elevators .....	June 11, 1878	416	122 123	13	1071
208, 391	Hinkle, Wilber W., Hood's Mills, Md. Clearer for coffee and tea pots .....	Sept. 24, 1878	883	257	14	473
203, 542	Hinks, Joseph, Birmingham, England. Lamp-wick raiser .....	May 14, 1878	341	97, 98	13	876
198, 981	Hinrichs, Charles F. A., and Charles Reistle, Brooklyn, N. Y., assignors to said Hinrichs. Lamp-burner .....	Jan. 8, 1878	271	78	13	58

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203, 342	Hinrichs, Charles F. A., and Charles Reistle, assignor to said Hinrichs, Brooklyn, N. Y. Lamp-burner	May 7, 1878	110	32	13	835
201, 013	Hinson, James A., Oskaloosa, Iowa. Vehicle running-gear	Mar. 5, 1878	192	61	13	445
267, 181	Hinz, Carl, San Francisco, Cal. Blind-wiring machine	Aug. 20, 1878	536	167	14	283
190, 201	Hinze, William. (See Fair & Hinze.)					
	Hipkins, William, assignor of one-fourth interest to Henry D. Meek, Bellaire, Ohio. Paper shutter for windows	Jan. 15, 1878	593	173	13	108
	Hipkins, William L. (See Love, William H., assignor.)					
209, 683	Hird, James, Bishopstow, England. Sheet-delivery apparatus for printing-presses	Nov. 5, 1878	159	47	14	702
206, 109	Hirsch, Wilhelm, Radeberg, near Dresden, Saxony. Glass annealing and working furnace	July 16, 1878	716	206	14	108
190, 204	Histed, Thaddeus Constantine, Salina, Kans. Grain-separator	Jan. 15, 1878	509	149	13	95
204, 573	Hitchcock, Charles B., Indianapolis, Ind. Tilting chair	June 4, 1878	141	47	13	1033
206, 110	Hitchcock, D. Gardner, assignor of one-half interest to Henry Clark, Syracuse, N. Y. Coin-holder	July 16, 1878	717	206	14	108
206, 946	Hitchcock, Dwight, assignor of one-half interest to George McBride, jr., Syracuse, N. Y. Measuring-funnel	Aug. 13, 1878	311	93	14	248
200, 533	Hitchcock, James M., Michigan City, Ind. Escapement for watches and clocks	Feb. 19, 1878	660	194	13	550
201, 014	Hitchcock, Moses Lorenzo, assignor of one-half interest to John Bergin, Cornwall, Ontario, Canada. Slicer	Mar. 5, 1878	193	61	13	445
	Hitchcock, P. A. (See Wakeman, Charles E., assignor.) (Reissue.)					
205, 640	Hitchcock, Robert, Watertown, N. Y. Ship-lamp	July 2, 1878	180	54	14	32
206, 947	Hite, Byron S., Fulton, Mo. Heat-fender for cooking-stoves	Aug. 13, 1878	312	93	14	248
200, 060	Hitt, Daniel F., Ottawa, Ill. Surveyor's plotting-instrument	Feb. 5, 1878	170	53	13	239
199, 710	Hitter, Jean A., jr., Saint Martinsville, La. Punch for cutting letters	Jan. 29, 1878	1053	308	13	196
200, 684	Hitter, Jean Alfred, jr., Saint Martinsville, La. Type-writing machine	Nov. 5, 1878	161	47	14	702
199, 065	Hixson, Ezra, assignor of one-half interest to George C. Boggs and G. W. Plotts, Russell, Iowa. Pruning-knife	Jan. 8, 1878	352	104	13	71
	Hoadley, Isaac N. (See Hoadley, Lawrence W., assignor.)					
203, 044	Hoadley, Lawrence W., assignor of two-thirds interest to Isaac N. Hoadley, Peachville, Pa. Oil-well packing	Apr. 30, 1878	1290	373	13	791
204, 574	Hoag, Albert, Grand Isle, Vt. Hand corn and bean planter	June 4, 1878	142	47	13	1033
267, 418	Hoag, Andrew J., Battle Creek, Mich. Grain thrasher and separator	Aug. 27, 1878	815	241	14	321
202, 819	Hoagland, George H., Port Jervis, N. Y. Fire-box for steam-boilers	Apr. 23, 1878	1054	302	13	756
202, 820	Same. Lubricator	Apr. 23, 1878	1055	303	13	757
202, 651	Hoard, Frederick R., Providence, R. I. Toy vehicle	Apr. 23, 1878	877	251	13	724
	Hoard, John W. (See Vaughan, Henry W., assignor.)					
8, 170	Hoard, John W., Providence, R. I. Toy money-box	Apr. 9, 1878	505	147	13	674
206, 789	Hoban, Michael, Saint Paul, Minn. Chimney-cleaner	Aug. 6, 1878	139	43	14	223
203, 916	Hobart, John H., and Charles W. Steward, Oakland, Cal. Amalgamator	May 21, 1878	736	211	13	933
207, 870	Hobart, John H., Oakland, and John T. Best, San Francisco, Cal. Ore washer and amalgamator	Sept. 10, 1878	309	94	14	391
198, 741	Hobbs, John H., Wheeling, W. Va. Manufacture of glassware	Jan. 1, 1878	11	2	13	10
199, 066	Same. Glass chandelier-trimming	Jan. 8, 1878	353	104	13	71
206, 111	Same. Glass mold	July 16, 1878	716	207	14	108
199, 439	Hobbs, Jonas, Nineveh, N. Y. Wagon-standard	Jan. 22, 1878	748	219	13	141
	Hobbs, Thomas J. (See Barnell & Hobbs.)					
	Same. (See Tenney & Hobbs.) (Reissue.)					
199, 711	Hobbs, Thomas J., and Leonard Hunting, Baldwinville, Mass. Hobby-horse	Jan. 29, 1878	1053	308	13	196
202, 340	Hochheimer, John, Baltimore, Md. Plating-machine	Apr. 16, 1878	534	156	13	682
	Hockett, Prior W., et al. (See Brundon, James Casey, assignor.)					
199, 293	Hocking Valley Manufacturing Company. (See Borneman & Shepard, assignor.)					
268, 600	Hodel, Adolf, Jefferson and Frank A. Strauber, Chicago, Ill. Garden-sprinkler	Jan. 15, 1878	595	174	13	108
208, 601	Hodel, Joseph A., Cumberland, Md. Apparatus for forming valve-yokes	Oct. 1, 1878	146	42, 43	14	508
199, 292	Same. Machine for straightening car-axes	Oct. 1, 1878	147	43	14	509
8, 498	Hodgdon, Israel H., assignor to self and William Beatty, Gray, Me. Horse-blanket	Jan. 15, 1878	595	174	13	108
	Hodges, Samuel Park, Martling, Mo., and John Wheeler Yelton, Denver, Colo.; said Yelton assignor to said Hodges. Machine for making barrels	Nov. 19, 1878	713	213	14	784
198, 940	Hodges, Addison S., Hyde Park, assignor of one-half interest to E. B. Wildes, Ipswich, Mass. Stove and furnace lining	Jan. 8, 1878	230	65	13	51
206, 788	Hodges, Andrew J. (See Mohler, Charles F. and James B., assignors.)					
	Hodges, Andrew J., Peoria, and James B. Mohler, Pekin, Ill.; said Mohler assignor to said Hodges. Harvester-reel adjustment	Aug. 6, 1878	138	43	14	223
209, 047	Same. Harvester-reel	Oct. 15, 1878	634	189	14	587
199, 345	Hodges, George, assignor to Eugene B. and Theron S. Winship, Racine, Wis. Wind-mill	Jan. 15, 1878	649	190	13	117
207, 650	Hodges, Henry F., Walnut, Ill. Wind-wheel	Sept. 3, 1878	78	23	14	359
207, 521	Hodges, James W., Flushing, N. Y. Gas-generator	Aug. 27, 1878	925	272	14	334
201, 674	Hodges, Leonard L., Boston, Mass. Organ-stop draw-knob	Mar. 26, 1878	900	275	13	563
	Hodges, O. F. (See Root, Datus Nelson, assignor.)					
210, 326	Hodgetts, William James, Wordsley, Kingswinford, England. Ornamenting articles of glass	Nov. 26, 1878	879	258	14	809
201, 416	Hodgson, Thaddeus, Amherst, Canada. Saw-sharpening machine	Mar. 19, 1878	628	192	13	520
	Hoe & Co., R. (See Miller, Warren P., assignor.) (Reissue.)					
	Same. (See Preston, George, assignor.)					
8, 346	Same. (See Spalekhafer, William, assignor.)					
	Hoe, Richard M., New York, N. Y. Printing-machine	July 23, 1878	1065	305	14	155
	Hoeffler, Albert. (See Senef & Hoeffler.)					
209, 395	Hoeffler, Albert, and Albert Senef, Pottsville, Pa.; said Senef assignor to said Hoeffler. Friction-clutch for foot-power	Oct. 29, 1878	1038	302	14	648
205, 484	Hoeft, Gebhard, and Adolph Homeier, Belleville, Ill. Photographic negative	July 2, 1878	21		14	11
203, 455	Hoeft, Charles W., Carlinville, Ill. Winding attachment for watches	May 7, 1878	233	66	13	852
200, 297	Hoen, August, Baltimore, Md. Street-lamp	Feb. 12, 1878	415	123	13	335
306, 790	Hoenshell, Henry, Streator, Ill. Draw-bridge gate	Aug. 6, 1878	140	43	14	224
200, 262	Hoerr, John, Denison, Tex. Cooling attachment for barrels	Oct. 22, 1878	891	260	14	625
199, 067	Hoff, Augustus, Brooklyn, N. Y. Saddle-bag	Jan. 8, 1878	353	104	13	71
203, 456	Hoff, Charles, Cincinnati, Ohio. Carbureting attachment for gas-burner	May 7, 1878	234	67	13	852
	Hoff, William Bainbridge. (See Joett & Hoff.)					
207, 275	Hoffecker, John S., assignor to Vulcanized Fiber Company, Wilmington, Del. Nut-lock	Aug. 20, 1878	656	194	14	285
202, 878	Hoffman, Anthony A., New York, N. Y. Table-bedstead	Apr. 23, 1878	1059	303	13	757
200, 395	Hoffman, Austin D., assignor of one-half interest to William A. Amburg, Chicago, Ill. Lubricator for shafting	Feb. 19, 1878	527	155	13	330

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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201, 610	Hoffman, Austin D., Chicago, Ill., assignor to John J. Baker and James I. Wallace. Sickie-grinder.	Mar. 26, 1878	842	255	13	554
207, 085	Hoffman, Clara P., and Nicholas Meyers, Buffalo, N. Y.; said Meyers assignor to said Hoffman. Blind-stitch sewing-machine.	Aug. 13, 1878	394	122	14	250
200, 298	Hoffman, James H., New York, N. Y., and Charles Spofford, Boston, Mass.; assignors to said Hoffman. Paper collar.	Feb. 12, 1878	416	124	13	305
202, 347	Hoffman, John B., Waterloo, Iowa. Hay-rack.	Apr. 16, 1878	535	156 157	13	683
200, 061	Hoffman, Joseph, and Clara W. Boman, assignors to Joseph Reckendorfer, New York, N. Y. Pen-holder.	Feb. 5, 1878	171	55	13	200
204, 041	Hoffman, Joseph, assignor to Joseph Reckendorfer, New York, N. Y. Pen-holder.	May 21, 1878	872	250	13	950
210, 256	Hoffman, Joseph, New York, N. Y. Ruling attachment for pen-holders.	Nov. 26, 1878	802	238	14	799
207, 355	Hoffman, Philip, Hoboken, N. J. Lubricator.	Aug. 27, 1878	750	224	14	313
202, 822	Hoffman, Reinhold, Marienberg, Germany. Manufacture of ultramarine colors.	Apr. 23, 1878	1057		13	757
202, 821	Hoffmann, William H., Passaic, N. J. Compound engine.	Apr. 23, 1878	1056	303	13	757
209, 685	Hoffmann, Charles, New York, N. Y. Blow-pipe.	Nov. 5, 1878	162	47	14	702
	Hoffmann, Conrad. (See Hoffmann, Friedrich W. and Conrad.)					
205, 551	Hoffmann, Fredrick A., assignor to self and Samuel Welch, Baldwin City, Kans. Grain steamer and drier.	July 2, 1878	92	26	14	20
	Hoffmann, Friedrich W. (See Dahler & Hoffmann.)					
208, 315	Hoffmann, Friedrich W. and Conrad, New York, N. Y. Cigar-maker's knife.	Sept. 24, 1878	807	235	14	463
	Hoffmann, Herman. (See Borland & Hoffmann.)					
200, 012	Hogan, Andrew Isum, Mason, Ill. Machine for cutting shingles.	Mar. 5, 1878	93	32	13	429
209, 396	Hogan, Andrew Isum, assignor to self and Uriah Perry, Le Cles, Ill. Machine for cutting basket-splints.	Oct. 29, 1878	1038		14	648
207, 276	Hogan, Hugh F., Albion, Ind. Churn.	Aug. 20, 1878	657	195	14	295
201, 922	Hogan, John, Fort Worth, Tex. Car-coupling.	Apr. 2, 1878	64	17	13	608
	Hogan, Matthew. (See Cullen, Michael, assignor.)					
202, 652	Hogan, Matthew, Hartford, Conn. Water-closet.	Apr. 23, 1878	878	251 252	13	734
202, 653	Same. Water-cock.	Apr. 23, 1878	879	252	13	734
203, 045	Same. Water-closet.	Apr. 20, 1878	1291	374	13	791
204, 822	Same. Water plug or hydrant.	June 11, 1878	417	123	13	1071
206, 237	Hogan, Patrick, and Daniel Whitlock, Newark, N. J. Machine for attaching heels to boots and shoes.	July 23, 1878	878	250 251	14	132
	Hogen Stamped Elbow Company. (See Cady, Frank P., assignor.)					
	Hoglen, Frank M., et al. (See Krutzsch, William, assignor.)					
	Hoglen, George R., et al. (See Krutzsch, William, assignor.)					
207, 739	Holbrook, Albert, Providence, R. I. Loom-picker.	Sept. 3, 1878	158	48	14	369
200, 612	Holbrook, Amos, Lockport, N. Y. Buck-saw frame.	Feb. 26, 1878	758	222	13	373
	Holbrook, Charles L. (See Johnson, Samuel W., assignor.)					
	Holbrook, Elliot. (See Berlitz & Morgan, assignors.)					
204, 042	Holbrook, Harry C., Louisville, Ky. Device for marking plug-tobacco.	May 21, 1878	873	250	13	950
200, 329	Holcomb, Abel P., assignor to Huntley, Holcomb & Hine, Silver Creek, N. Y. Attachment for sewing-machines.	July 23, 1878	991	282	14	146
198, 941	Holcomb, Edgar B., and Dorr A. Clay, Port Leyden, N. Y. Hide-fleshing machine.	Jan. 8, 1878	211	66	13	51
202, 439	Holcomb, Henry, Painesville, Ohio. Heating-furnace.	Apr. 16, 1878	625	183	13	695
	Holcomb, Isaac M., et al. (See Macy, Charles R., assignor.)					
205, 864	Holcomb, James R., York, Ohio. Acoustic telephone.	July 9, 1878	445	126	14	69
	Holcomb, Joel R., et al. (See Spalding, Dwight M., assignor.)					
203, 732	Holcomb, Norton B., Geneva, Ohio. Machine for constructing hand-rakes.	May 14, 1878	533	151	13	899
8, 475	Holden, Cyrus B., Worcester, Mass., assignor, by mesne assignments, to William H. Field, Port Chester, N. Y. Horse hay-rake. (Reissue.)	Nov. 5, 1878	228	68	14	711
205, 641	Holden, Daniel L., Philadelphia, Pa. Condenser for ice-machines.	July 2, 1878	182	54	14	32
205, 642	Same. Apparatus for refrigerating the non-congealable liquid employed in the manufacture of ice.	July 2, 1878	183	55	14	33
205, 643	Same. Method and apparatus for producing ice.	July 2, 1878	184	55	14	33
207, 277	Same. Apparatus for curing meat.	Aug. 20, 1878	657	195	14	295
207, 278	Same. Apparatus for making ice.	Aug. 20, 1878	658	195	14	296
209, 892	Holden, Daniel L., Philadelphia, Pa., and Edward W. Byrn, Washington, D. C.; said Byrn, assignor to said Holden. Refrigerating and air-cooling apparatus.	Nov. 12, 1878	387	115	14	736
204, 732	Holden, James H., assignor to J. Estey & Co., Brattleborough, Vt. Valve tremolo for organs.	June 11, 1878	322	98	13	1069
208, 392	Holden, Magdalene, Philadelphia, Pa. Pocket-spittoon.	Sept. 24, 1878	804	257	14	473
201, 785	Holden, Oliver, Saint Louis, Mo. Grain-drier.	Mar. 26, 1878	1013	309	13	589
206, 948	Holdredge, Charles Henry, Westerly, R. I., and Charles Herbert Cowan, Stonington, Conn. Thrill-coupling.	Aug. 13, 1878	312	95	14	248
209, 397	Holland, Ashley Winn, and Edgar N. McKinnin, Lathrop, Mo. Animal-trap.	Oct. 29, 1878	1039	302	14	648
201, 527	Holland, Charles, Chicago, Ill. Hydrocarbon-gas apparatus.	Mar. 19, 1878	738	225	13	536
203, 826	Holland, Charles, assignor to Park Holland, Chicago, Ill. Hydrocarbon-vapor generator and burner.	May 21, 1878	644	181 182	13	921
203, 827	Same. Hydrocarbon-vapor generator and burner.	May 21, 1878	645	182	13	921
203, 828	Same. Hydrocarbon-generator and burner and gas-generator.	May 21, 1878	646	182 183	13	921
203, 829	Same. Hydrocarbon-vapor generator and burner.	May 21, 1878	647	183	13	921
203, 830	Same. Hydrocarbon-vapor generator and burner and gas-generator.	May 21, 1878	647	183	13	921
203, 831	Same. Hydrocarbon-vapor generator and burner.	May 21, 1878	648	184	13	921
203, 832	Same. Hydrocarbon generator, burner, and lighter.	May 21, 1878	649	184 185	13	921
206, 451	Holland, James M., Wilmington, Del. Hand-pump.	July 30, 1878	1143	328	14	169
202, 654	Holland, John, Cincinnati, Ohio. Pencil.	Apr. 23, 1878	880	252	13	734
202, 655	Same. Fountain-pen point.	Apr. 23, 1878	881	252	13	735
209, 566	Same. Tooth-pick.	Nov. 5, 1878	33	10	14	685
	Holland, Park. (See Holland, Charles, assignor.)					
206, 672	Holland, Timothy, Troy, N. Y. Oil-cup.	Aug. 6, 1878	16	5	14	209
204, 043	Holland, William T., Brooklyn, N. Y. Sheet-metal-bending machine.	May 21, 1878	874	250	13	950
	Hollenbeck, Joseph P. (See Morris & Hollenbeck.)					
209, 808	Holley, Harrison Wyson, Hale's Ford, Va. Machine for rolling and cutting tobacco.	Nov. 12, 1878	302	90	14	725
208, 735	Holliday, John, and John Lambert, Brooklyn, assignors to William Slack, Stapleton, N. Y. Utilizing tin-scrap and manufacture of stannates.	Oct. 8, 1878	297		14	536
201, 675	Hollingsworth, Benjamin, Sigourney, Iowa. Fastening for latches.	Mar. 26, 1878	901	275	13	567
206, 877	Hollingsworth, Henry, Danville, N. Y. Paper-pulp washer.	Aug. 13, 1878	241	76	14	249
210, 853	Same. same.	Dec. 17, 1878	515	146	14	908
	Hollingsworth, John F. (See Myrick, Israel E., assignor.)					
204, 044	Hollingsworth, Joseph, Jonesborough, Ind. Wind-engine.	May 21, 1878	874	250	13	950

*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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210,327	Hollis, George F., assignor of one-half interest to George S. Russell, Marlborough, Mass. Counter-guide	Nov. 26, 1878	881	259	14	809
205,088	Hollman, John H., New York. Finger-nail trimmer	June 18, 1878	711	211	13	1113
206,020	Hollweg, Julius H., New York, N. Y. Velocipede	July 16, 1878	623	180	14	96
209,048	Holly, Carlos, Lockport, N. Y. Steam diaphragm-meter	Oct. 15, 1878	655	189	14	587
210,328	Same. Steam-meter	Nov. 26, 1878	881	259	14	809
203,457	Holly, James H. (See Knapp, John G. and James W., assignors.)	May 7, 1878	235	67	13	852
198,942	Holman, John, Rochester, Ky. Fruit-picker	Jan. 8, 1878	233	66	13	51
204,733	Holmes, Albert B., Ipswich, Mass. Swinging frame for supporting hammocks	June 11, 1878	322	98	13	1061
	Holmes, Alfred C., Delavan, Ill. Corn-crib door					
	Holmes, Booth & Haydens. (See Hayden, Hiram W., assignor.)					
	Holmes, Charles E. L. (See Lawrence & Holmes.)					
	Holmes, Francis M. (See Fudge, Holmes & McDonald.)					
202,545	Holmes, Frederick H., Detroit, Mich. Device for holding and counting coin	Apr. 16, 1878	746	215	13	710
8,298	Holmes, George H., New Britain, Conn. Take-up for looms (Reissue)	June 25, 1878	1113	329	13	1171
	Holmes, H. C. (See Williams, George, assignor.)					
210,533	Holmes, Hector A. and Watson M., Owatonna, Minn. Grain-binder	Dec. 3, 1878	156	41	14	843
202,944	Holmes, John, Jersey City, N. J., assignor of one-half interest to George H. Coutts, New York, N. Y. Sugar-coated biscuit	Apr. 30, 1878	1195		13	778
206,949	Holmes, John Bull, assignor to self and Ross McC. Lanterman, Grayville, Ill. Ventilator for blow and dust rooms	Aug. 13, 1878	313	95	14	248
	Holmes, Joseph W. (See Chapman, John Y., assignor.)					
205,485	Holmes, Joseph W., Wheatville, N. Y. Sun-dial	July 2, 1878	21	7	14	11
202,260	Holmes, Milton C., Woonsocket, R. I. Chuck	Apr. 9, 1878	426	124	13	663
	Holmes, N. H., et al. (See Hansen, Charles, assignor.)					
209,123	Holmes, Theodore P., and James F. Eldridge, Middleborough, Mass. Harness-saddle	Oct. 22, 1878	756	220	14	606
207,279	Holmes, Thomas J., Boston, Mass. Bottle stopper and sprinkler	Aug. 20, 1878	660	195	14	296
	Holmes, Watson. (See Crandall, Henry B., assignor.)					
204,823	Holmes, Watson M. (See Holmes, Hector A. and Watson M.)					
	Holmström, Wilhelm, Westervick, Sweden. Registering attachment for measuring rules	June 11, 1878	417	123	13	1071
	Holmwood, James, jr. (See Sibley & Holmwood.)					
210,534	Holt, Charles L., Portland, Me. Filtering-frame	Dec. 3, 1878	158	41	14	844
211,015	Holt, Henry Percy Leeds, England. Car-starter	Dec. 17, 1878	711	196	14	931
206,021	Holt, Moses Kimball, Haverhill, Mass. Fastening for hat-elastics	July 16, 1878	623	180	14	97
	Holt, William. (See Matthews & Holt.)					
205,387	Holtzman, Louis D., Hoboken, N. J. Musical notation	June 25, 1878	1038	308	13	1161
	Holton, Charles C. (See Good, Edward G., assignor.)					
199,440	Holton, John Charles, assignor to self and W. C. and S. C. Gough, Owensborough, Ky. Horse hay-rake	Jan. 22, 1878	749	220	13	141
199,828	Holtzer, Charles W., Brookline, Mass. Centrifugal bell-alarm	Jan. 29, 1878	1164	342	13	213
205,385	Holub, Frank, assignor of two-thirds interest to Nathan E. Platt and Edwin Thorn, Chicago, Ill. Machine for manufacturing horseshoe-blanks	June 25, 1878	1036	307	13	1160
205,386	Same. Machine for rolling horseshoe-blanks	June 25, 1878	1037	308	13	1160
205,644	Same. Horseshoe-machine	July 2, 1878	185	55, 56	14	33
205,645	Same. Machine for creasing, punching, and swaging horseshoe-blanks	July 2, 1878	187	57	14	33
199,978	Holub, Joseph, New York, N. Y. Steam-engine	Feb. 5, 1878	86	28	13	246
207,522	Homan, William C., assignor to Meriden Britannia Company, Meriden, Conn. Covered dish	Aug. 27, 1878	928	272	14	335
	Homeier, Adolph. (See Hoeft & Homeier.)					
202,440	Homrighous, John, Royalton, Ohio. Burial-casket	Apr. 16, 1878	626	183	13	695
208,316	Hood, Alexander J., Richland Centre, Wis. Foot-power	Sept. 24, 1878	808	236	14	463
	Hood, William H. (See Goodwin, Hiland W., assignor.)					
	Hoogland, A. D., et al. (See Truesdell, Lewis W., assignor.)					
	Hooker, David P. (See Timby, Benjamin Johnson, assignor.)					
	Hooker, George W. (See Scharf, Samuel R., assignor.)					
	Same. (See Shane & Hooker.)					
209,398	Hooker, George W., Grand Rapids, Mich. Sled-brake	Oct. 29, 1878	1041	302	14	649
199,441	Hooker, William Chauncey, Abingdon, Ill. Gate	Jan. 22, 1878	749	220	13	141
204,670	Hooper, George H. B., Toronto, Ontario, Canada. Cartridge-extractor	June 11, 1878	254	79	13	1052
	Hooper, Nicholas B. (See Keenan, William, assignor.)					
210,035	Hooper, Richard Henry, Boston, Mass. Cinder-guard for car roofs	Nov. 19, 1878	554	166	14	762
205,089	Hooper, Robert, Baltimore, Md. Governor for engines	June 18, 1878	711	211	13	1113
	Hoosier Drill Company. (See Fulham, Jesse P., assignor.)					
	Same. (See Green, Oliver C., assignor.)					
	Hoosier Drill Company, et al. (See Luse, Daniel and Daniel F., assignors.) (Reissue.)					
	Hoosier Drill Company. (See Westcott & Halteman, assignors.)					
202,546	Hooton, Marsena M., Brookside, assignor of one-half interest to Mark M. Pomeroy, Chicago, Ill. Band-cutting feeder for thrashers	Apr. 16, 1878	747	216	13	710
206,330	Hooven, Alexander, and William Henry Adle, Norristown, Pa. Rolling-mill	July 23, 1878	992	282	14	146
202,030	Hoover, Reuben, Boonesborough, Iowa. Feather-renovator	Apr. 2, 1878	109	49	13	623
201,015	Hoover, William Upton, Bowling Green, Ky. Combined bed-bottom and fire-escape	Mar. 5, 1878	194	62	13	445
201,787	Hoover, Zenas L., Moline, Ill. Post-hole spade	Mar. 26, 1878	1015	310	13	580
206,791	Hopfen, Anton, New York, N. Y. Shaving-brush	Aug. 6, 1878	141	43	14	224
205,961	Hopkin, George E., Philadelphia, Pa. Cooking-stove	July 16, 1878	564	161	14	89
206,238	Hopkins, Charles H., Lyndonville, Vt. Seal-bolt	July 23, 1878	879	251	14	132
203,150	Hopkins, David A., Park Ridge, N. J. Car-axle box	Apr. 30, 1878	1296	408	13	805
	Hopkins & Dickinson Manufacturing Company. (See Wadsworth, Herbert, assignor.)					
210,607	Hopkins, John H., Reynoldsville, Pa. Scroll-sawing machine	Dec. 10, 1878	248	68	14	865
	Hopkins, Joseph H., et al. (See Blakeslee, Charles W., assignor.)					
203,046	Hopkins, Thomas A., Providence, R. I. Center rim for watch-cases	Apr. 30, 1878	1292	374	13	791
199,829	Hopkins, William H., and Martin L. Stebbins, Waverly, Iowa. Buggy-top	Jan. 29, 1878	1165	342	13	214
203,151	Hopkins, William W., Thornton, Ind. Calculating-machine	Apr. 30, 1878	1398	408	13	805
	Hopper, Edward, et al. (See Nicholson, Francis P., assignor.)					
	Hopper, Garrett H. (See Evans, George R., assignor.)					
	Hopper, I. A., et al. (See Wallace, Joseph, assignor.)					
207,356	Horn, William, jr., Conrad Schaefer, and Frank Joseph Wehrle, Keokuk, Iowa. Refrigerator	Aug. 27, 1878	752	224	14	313
	Hornback, Robert, et al. (See Thompson, Salathiel S., assignor.)					
200,455	Horne, Charles H., Berwick, Me. Washing-machine	Feb. 19, 1878	583	172	13	339
210,937	Horne, John H., Lawrence, Mass. Bed-plate for paper-pulp engines	Dec. 17, 1878	623	173	14	821
206,673	Horne, Caleb, Philadelphia, Pa. Track-raiser	Aug. 6, 1878	17	5	14	209
	Hornum Patent Register Manufacturing Company. (See Hornum, William H., assignor.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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205, 646	Hornum, William H., New York, N. Y., assignor to Hornum Patent Register Manufacturing Company. Fare-box	July 2, 1878	188	57	14	33
207, 740	Hornum, William H., assignor to Hornum Patent Register Manufacturing Company. New York, N. Y. Fare-register	Sept. 3, 1878	158	40	14	369
205, 090	Horrall, William A., and Joseph J. Verckler, Chico, Cal. Seed-sower	June 18, 1878	713	211	13	1113
205, 270	Horrie, David, Keokuk, Iowa. Railway ditching machine	June 25, 1878	908	269	13	1144
205, 188	Horrie, Malcolm, assignor of one-half interest to Frank B. Handwerk, Morris, Ill. Sheet-metal roofing	June 25, 1878	825	244	13	1133
199, 712	Horrocks, Abraham, and Edward D. Stevens, Bardolph, Ill. Roller for drain-tile machine	Jan. 20, 1878	1054	308	13	196
199, 906	Horsford, Samuel, Halifax, Nova Scotia Canada. Skate	Feb. 5, 1878	15	5	13	235
201, 417	Horsley, Peter N., Jersey City, N. J. Shutter-fastening	Mar. 10, 1878	629	192	13	621
	Horstmann, F. Oden, et al. (See Alton, Richard C., assignor.)					
	Horstmann, Richard. (See Seymour, Carl, assignor.)					
	Horstmann, Walter, et al. (See Alton, Richard C., assignor.)					
8, 352	Horton, Byron C., administrator. (See Horton, Chace B.) (Reissue.)					
	Horton, Chace B., deceased, Roby L. and Byron C. Horton, administrators and assignors to Simeon Howes, Alpheus and Norman Babcock, and Carlos Ewell, Silver Creek, N. Y. Grain-scourer	July 30, 1878	1361	391	14	196
210, 424	Horton, Henry B., Ithaca, N. Y. Mechanical musical instrument	Dec. 3, 1878	36	8	14	823
207, 871	Horton, Jacob C., New York, and James Brady, Brooklyn, N. Y. Elastic packing for pistons, &c.	Sept. 10, 1878	312	94	14	392
	Horton, James A. (See Walker & Horton.)					
208, 907	Horton, Numon N., Kansas City, Mo. Reclining-chair	Oct. 15, 1878	408	144	14	567
	Horton, Roby L., administrator. (See Horton, Chace B.) (Reissue.)					
206, 177	Horton, William Newman, San Francisco, Cal. Wooden-pipe joint	July 23, 1878	812	232	14	124
	Hosford, William B. (See Austin & Hosford.)					
210, 535	Hoshall, David W., Dallas, Tex. Seed-planter	Dec. 3, 1878	158	42	14	844
200, 534	Hotchkiss, Arthur E., Cheshire, Conn. Clock-movement	Feb. 1, 1878	661	195	13	350
208, 879	Hotchkiss, Charles A., Bridgeport, Conn. Curry-comb	Oct. 8, 1878	459	132	14	557
199, 068	Hotchkiss, George M., New Haven, and John A. Clinton, West Haven, Conn.; said Clinton assignor to said Hotchkiss. Buckle	Jan. 8, 1878	354	104	13	71
	Hotchkiss, George W., et al. (See Glenn, John S., assignor.)					
200, 299	Hotchkiss, Seymour L., Tioga, Pa. Clothes-pin	Feb. 12, 1878	416	124	13	305
	Hotchkiss, W. T., et al. (See Wolbrecht, John M., assignor.)					
208, 602	Houck, Frank A., and James E. Gardner, Golden, Mo. Boiler washing-machine	Oct. 1, 1878	148	43	14	509
	Hough, E. C. (See Murphy, Leander, assignor.)					
202, 824	Hough, John Thompson, Pittsburg, Pa. Horseshoe-nail machine	Apr. 23, 1878	1060	304	13	757
	Houghtaling, William. (See Flatler & Houghtaling.)					
	Houghton, Charles. (See Palmer & Houghton.) (Reissue.)					
203, 152	Houghton, Charles, Boston, Mass., assignor to Merino Shoe Company. Overshoe or gaiter	Apr. 30, 1878	1400	400	13	805
	Houghton, Charles H. (See Huntington, George B., assignor.)					
209, 809	Houghton, Edward C., assignor of one-half interest to Jott Grant, Boston, Mass. Reversible filter	Nov. 12, 1878	303	90	14	725
8, 329	Houghton, John P. (See Forsyth, James, assignor.)					
200, 300	Houghton, Lewis T., Worcester, Mass. Heating-drum	July 9, 1878	541	154	14	82
	House, Charles D., New York, N. Y. Instrument for smoothing and leveling the teeth of horses	Feb. 12, 1878	417	124	13	305
	House, Edward O. (See Morris & Hollenbeck, assignors.)					
206, 878	House, Henry A., Bridgeport, Conn. Machine for crocheting fabrics	Aug. 13, 1878	243	77	14	241
208, 096	Same.....Paper dish	Sept. 17, 1878	553	166	14	428
208, 097	Same.....Apparatus for molding dishes from paper	Sept. 17, 1878	553	166	14	428
209, 686	Same.....Manufacture of flanged articles of paper	Nov. 5, 1878	163	48	14	703
	House, James Alford. (See Wianer & House.)					
204, 045	House, James Alford, Bridgeport, Conn. Hinge	May 21, 1878	875	251	13	950
206, 239	Same.....Sewing-machine	July 23, 1878	880	251	14	132
	Same.....same	Nov. 19, 1878	555	167	14	762
210, 036	House, Thomas J., Allegheny, Pa. Bedstead-fastening	Nov. 19, 1878	648	192	14	775
210, 123	House, William M., New York, N. Y. Collar	Feb. 19, 1878	662	195	13	351
208, 242	Housley, Daniel W., Grove City, Ill. Spring-hinge	Sept. 24, 1878	729	214	14	454
	Houston, William. (See Brown & Houston.)					
205, 746	Houston, William B., Cincinnati, Ohio. Stove-leg fastening	July 9, 1878	319	93	14	53
204, 734	Housum, Charles P., Decatur, Ill. Device for holding and driving barbs into fences	June 11, 1878	323	98	13	1061
204, 735	Same.....Rail-fence barb	June 11, 1878	324	98	13	1061
204, 736	Housum, Charles P., and Hugh W. Hill, Decatur, Ill. Device for marking animals	June 11, 1878	325	99	13	1061
206, 500	Housum, Charles P., Decatur, Ill. Tag for marking animals	July 30, 1878	1270	365	14	185
201, 611	Howey, William H., Springfield, Mass. Gas-light extinguisher	Mar. 26, 1878	843	256	13	554
	How, Moses. (See Keith, Thomas K., assignor.)					
203, 733	How, Woodbury Stowe, Cincinnati, Ohio, assignor to Samuel S. White, Philadelphia, Pa. Dental-tool holder	May 14, 1878	534	151	13	899
207, 741	How, Woodbury Stowe, Cincinnati, Ohio. Dental chair	Sept. 3, 1878	160	49	14	369
	Howard, Andrew, et al. (See Lippincott, Joseph M., assignor.)					
209, 169	Howard, Cyrus B., assignor of one-half interest to S. M. Howard, Wheeling, W. Va. Calendar-inkstand	Oct. 22, 1878	805	233	14	612
206, 452	Howard, Denison Lockwood, and Thomas Dawson Atkinson, Nottawa, Mich. Ore-separator	July 30, 1878	1144	328	14	170
200, 536	Howard, Ephraim, Providence, R. I. Loom	Feb. 19, 1878	662	195	13	351
	Howard, George C. (See Simpson & Howard.)					
200, 301	Howard, James R., assignor to Marcus I. Wright, Saint Louis, Mo. Horseshoe	Feb. 12, 1878	418	124	13	305
199, 205	Howard, Josiah W., Newark, N. J. Painter's brush	Jan. 15, 1878	510	150	13	96
	Howard, Lyman Dean. (See Woodbridge, Nystrom & Howard.)					
205, 091	Howard, Matthew, Paris, Ky. Lap-link	June 18, 1878	714	212	13	1114
	Howard, S. M. (See Howard, Cyrus B., assignor.)					
	Howard, Thomas, et al. (See Shickle, Frederick, assignor.)					
199, 206	Howard, Thomas S. L., Somerville, assignor to G. W. Simmons, Boston, Mass. Button-hole-sewing machine	Jan. 15, 1878	511	150	13	96
	Howard, Warren. (See Osborne, Don D., assignor.)					
203, 917	Howard, William Carr, Grahamville, S. C. Rice-hulling machine	May 21, 1878	737	212	13	933
202, 031	Howard, William Henry, San Antonio, assignor of one-fourth interest to Camille E. Broussard, Galveston, and Rush M. Hutchins, Houston, Tex. Bale-tie	Apr. 2, 1878	170	49	13	623
206, 453	Howarth, William, Newark, N. J. Jet-heater	July 30, 1878	1146	328	14	170



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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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207, 036	Howdon, Robert J., Cincinnati, Ohio, and Jonathan E. Wood, Huntington, W. Va., assignors to Eureka Co-operative Foundry Association, Cincinnati, Ohio. Grate-holder.....	Aug. 13, 1878	300	122	14	230
204, 896	Howe, Allan D. (See Jones, Andros B., assignor.)					
203, 734	Howe, Benjamin J. C., Syracuse, N. Y. Submerged pump.....	June 18, 1878	521	152	13	1088
204, 329	Howe, Edwin A., Elyria, Ohio. Mechanical movement.....	May 14, 1878	535	152	13	900
	Howe, George H., Akron, Ohio, assignor of one-half interest to William M. Howe, } Austin, Minn. Grain-binder..... }	May 28, 1878	1104	{ 340 341 }	13	994
	Howe, Guy D., et al. (See Blincoe, John D., assignor.)					
	Howe, Henry M. (See Eustis, William E. C., assignor.)					
	Howe, James A. (See Nourse & Howe.)					
203, 047	Howe, Moses A., assignor of one-half interest to O. Bowen, Elyria, Ohio. Churn.....	Apr. 30, 1878	1293	375	13	791
	Howe, Otis. (See Howe, Tyler & Otis.)					
204, 222	Howe, Tyler & Otis, Cambridge, Mass. Bed bottom.....	May 28, 1878	1089	310	13	961
210, 037	Howe, William, Brooklyn, N. Y. Folding-hammock supporter.....	Nov. 19, 1878	557	167	14	762
198, 982	Howe, William M. (See Howe, George H., assignor.)					
	Howell, Francis A., Jersey City, N. J., assignor to William F. Reed, Brooklyn, N. Y. Show-cense	Jan. 8, 1878	272	78	13	58
200, 793	Howell, Hamilton, Salem, Ohio. Thill-coupling.....	Feb. 26, 1878	940	277	13	401
198, 767	Howell, Henry F., Sarnia, Ontario, Canada. Apparatus for roasting ores.....	Jan. 1, 1878	40	12	13	15
205, 092	Howell, Peter B., and Eli Cole, Horseheads, N. Y. Butter-worker	Sept. 3, 1878	161	49	14	309
	Howers, Carson F., Marlborough, assignor of one-half interest to Wilbur F. Brigham, Hudson, Mass. Harvester cutting apparatus	June 18, 1878	714	212	13	1114
	Howers, Simeon, et al. (See Horton, Chace B., assignor.)					
198, 742	Howland, Angelo, and Harold Lawton, Westerly, R. I. Shipping mechanism for spinning-mules	Jan. 1, 1878	12	3	13	10
205, 865	Howland, Edgar O., Philadelphia, Pa. Lifting-jack.....	July 9, 1878	446	127	14	69
202, 261	Howland, Esther A., Worcester, Mass. Car-coupling.....	Apr. 9, 1878	426	124	13	663
205, 053	Howland, George W., Boston, Mass. Mask.....	June 18, 1878	716	212	13	1114
207, 660	Howland, Lyman B., Lakeville, Mass. Picking-motion for looms.....	Sept. 3, 1878	78	24	14	359
	Howland, Marshall T. (See Green & Howland.)					
	Howland, William Monctfeld. (See Sieg, Rudolf, assignor.)					
205, 358	Howland, Willis, Ahnent, Mich. Churn.....	June 25, 1878	1039	308	13	1161
200, 913	Howse, Henry Langley, Sacramento, Cal. Oil cook-stove lamp.....	Mar. 5, 1878	13	32	13	429
208, 317	Howse, Henry Langley, San Francisco, Cal. Oil-stove	Sept. 24, 1878	809	236	14	464
210, 779	Howson, Henry, assignor to Hale & Kilburn Manufacturing Company, Philadelphia, Pa. Spring for tilting-chairs	Dec. 10, 1878	428	119	14	888
	Hoy, Albert H., Racine, Wis. Animal-trap.....	July 23, 1878	884	252	14	133
201, 346	Hoyt, Albert S., Winona, Minn. Grain-binder.....	Mar. 19, 1878	556	{ 170 171 }	13	510
205, 866	Hoyt, Ezra P., New York, N. Y. Vault-cover.....	July 9, 1878	447	127	14	69
210, 095	Hoyt, Francis M., Haverhill, Mass. Shoe	Dec. 10, 1878	339	93	14	670
199, 713	Hoyt, Frederick J., New York, N. Y. Lock for freight-cars	Jan. 29, 1878	1054	368	13	196
201, 016	Same. Hat-mirror.....	Mar. 5, 1878	194	62	13	445
	Hoyt, John W., et al. (See Gannon, Lawrence E., assignor.)					
206, 674	Hoyt, Otis, assignor to Illinois Springfield Watch Company, Springfield, Ill. Stem winding and setting watch.....	Aug. 6, 1878	18	6	14	209
209, 810	Hubbard, Charles W., Pittsburg, Pa. Saw.....	Nov. 12, 1878	364	91	14	725
203, 049	Hubbard, David B., Williamsport, Pa. Swing.....	Apr. 30, 1878	1295	375	13	791
204, 223	Hubbard, Eber, Medina, N. Y. Paper-pulp pail.....	May 28, 1878	1089	311	13	981
211, 016	Hubbard, Erwin C., Columbianna, Ohio, assignor to self and A. L. Roberts, Titusville, Pa. Screw-propeller.....	Dec. 17, 1878	713	196	14	932
	Hubbard, Gardiner G., trustee. (See Watson, Thomas A., assignor.)					
	Hubbard, George B. (See Hatch, Hyman and Albert T., assignors.)					
	Hubbard, James F. (See Potter & Hubbard.)					
205, 180	Hubbard, James F., assignor to self and Charles Potter, jr., Plainfield, N. J. Inking apparatus for printing-machine.....	June 25, 1878	826	245	13	1133
202, 547	Hubbard, Marshall E., Medina, N. Y. Machine for making pails from paper-pulp.....	Apr. 16, 1878	749	216	13	710
208, 730	Hubbard, Moses G., Norristown, Pa. Grain gleaner and binder.....	Oct. 8, 1878	298	86	14	536
208, 737	Hubbard, Moses G., and Josiah D. Heebner, Norristown, Pa. Grain gleaner and binder.	Oct. 8, 1878	299	86	14	536
	Hubbard, Walter C. (See Morrison & Hubbard.)					
210, 038	Hubbard, William H., Red Bank, N. J. Gate.....	Dec. 17, 1878	624	173	14	921
208, 820	Hubbell, Arthur Y., New York, N. Y. Vehicle-seat.....	Oct. 8, 1878	392	111	14	548
	Hubbell, Wilbur F. (See Williams & Hubbell.)					
209, 263	Hubbell, William Wheeler, Philadelphia, Pa. Alloy for coin.....	Oct. 22, 1878	891	.....	14	625
205, 389	Hubbell, William L., New York, assignor to Raymond Jenkins, Brooklyn, N. Y. Atomizer	June 25, 1878	1639	309	13	1161
8, 440	Hübel, Frederick A., Detroit, Mich. Machine for cutting off gelatine capsules (Reissue).....	Oct. 1, 1878	218	62, 63	14	518
199, 714	Hübel, Henry, assignor to Hieronymus and Julius Herold and Jacob Zwicker, New York, N. Y. Machine for crimping seamless foxing for boots and shoes.....	Jan. 29, 1878	1056	303	13	196
205, 867	Huber, Edward, John C. Titus, Edward Durfee, and James F. Swinnerton, assignors to Huber Manufacturing Company, Marion, Ohio. Portable engine.....	July 9, 1878	449	128	14	70
210, 536	Huber, Edward, Marion, Ohio. Feed-water heater.....	Dec. 3, 1878	169	42	14	844
	Huber, Francis X. (See Koch, Friedrich, assignor.)					
	Huber Manufacturing Company. (See Huber, Titus, Durfee & Swinnerton, assignors.)					
204, 224	Hubert, Charles Gengembre. (See Hubert, Henry Gengembre and Charles Gengembre.)					
	Hubert, Henry Gengembre and Charles Gengembre, New York, N. Y. Clasp for securing ribbons on rolls	May 28, 1878	1090	311	13	981
199, 366	Hubmann, Gustave, assignor to Felix Marx, New York, N. Y. Ornamenting marble and similar surfaces.....	Jan. 22, 1878	681	.....	13	120
199, 442	Huddleston, John S., Boston, Mass. Thermometer.....	Jan. 22, 1878	750	220	13	141
201, 348	Hudson, Augustus L., Hingham, Mass. Photographic camera.....	Mar. 12, 1878	434	133	13	486
207, 967	Hudson, Richard, assignor of one-half interest to Edward P. Davis, Washington, D. C. File-holder.....	Sept. 10, 1878	412	124	14	404
208, 393	Hudson, Robert, Gildersome, Great Britain. Freight-car.....	Sept. 24, 1878	885	258	14	473
203, 833	Hudson, William E., North Manchester, assignor to Cheney Brothers, Hartford, Conn. Expanding drum for paper-cutting machine.....	May 21, 1878	650	185	13	921
198, 743	Hudson, William S., Paterson, N. J. Crown-sheet for steam-boilers.....	Jan. 1, 1878	13	3	13	10
201, 528	Huebenthal, John, Selineville, Ohio. Churn.....	Mar. 19, 1878	739	{ 225 226 }	13	536
201, 923	Huebner, Caspar, Newark, N. J. Motor.....	Apr. 2, 1878	64	17	13	608
203, 570	Huff, Chauncey F. H., Covington, Ky., assignor to J. A. Fay & Co., Cincinnati, Ohio. Molding and carving machine.....	July 30, 1878	1271	365	14	165
207, 743	Same. Bit for carving-machines.....	Sept. 3, 1878	161	49	14	370
203, 543	Huff, Orison, Lyman, Me. Clothes-drier.....	May 14, 1878	342	98	13	876

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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206, 178	Huff, Orison, Lyman, Me. Pegging-machine	July 23, 1878	813	232	14	124
210, 329	Huff, Samuel, Mohican, Ohio. Knitting-machine	Nov. 26, 1878	882	260	14	800
205, 094	Huffman, E. Homer, Oskaloosa, Iowa. Graining-tool	June 18, 1878	716	213	13	1114
	Huffman, J. S. (See Wilber, Allen, assignor.)					
208, 821	Hughes, Benjamin, Portage, Wis. Sash-fastener	Oct. 8, 1878	392	112	14	549
211, 017	Hughes, Charles W., and Thomas E. Dyer, Fostoria, Ohio. Combined counter and heel-protector	Dec. 17, 1878	714	197	14	932
210, 425	Hughes, David W., Butler County, Ohio. Riding-plow	Dec. 3, 1878	38	8	14	828
8, 417	Hughes, Francis L., Rochester, N. Y. Child's carriage	Sept. 17, 1878	692	203	14	446
203, 153	Hughes, James R., Saugus, Mass. Egg-beater	Apr. 30, 1878	1400	409	13	805
199, 069	Hughes, John, Stapleton, N. Y. Furnace for burning pyrites	Jan. 8, 1878	355	105	13	72
	Hughes, John B. (See Breitschwerth & Hughes.)					
209, 617	Hughes, John W., Brooklyn, assignor to Mary A. Myers, West Chester, N. Y. Filter	Nov. 5, 1878	87	26	14	692
	Hughes, Reuben F., et al. (See Lanstrom, Reinhold, assignor.)					
201, 161	Hughes, Samuel, Charleston, S. C. Feed-water heater and purifier	Mar. 12, 1878	362	112	13	477
203, 458	Hughes, Smith E., Philadelphia, Pa. Carbureter	May 7, 1878	235	67	13	852
199, 548	Hughson, Kincaid A., Cortland Village, N. Y. Vehicle-body	Jan. 22, 1878	863	252	13	159
	Hugill, Joseph. (See Ayliffe, George, assignor.)					
199, 830	Hugunin, Robert B., New York, N. Y. Horseshoe	Jan. 29, 1878	1106	342	13	214
198, 977	Huie, Horace R., San Leandro, Cal. Vehicle-spring	Oct. 15, 1878	575	167	14	577
199, 549	Hulbert, Edwin James, Middletown, Conn. Screw-propeller	Jan. 22, 1878	864	253	13	159
199, 550	Same..... same	Jan. 22, 1878	865	253	13	159
211, 018	Hulburt, Henry H., Philadelphia, Pa. Lamp-globe	Dec. 17, 1878	714	197	14	932
	Hulburt, Samuel W. (See Goodwin & Hulburt.)					
	Hulett, David. (See Kirkham, Hulett & Chandler.)					
208, 822	Hulin, John S. (See Richard, Jean Elie, assignor.)	Oct. 8, 1878	393	112	14	549
	Hulings, Marcus, Oil City, Pa. Heating apparatus for buildings					
	Hull, Annie. (See Pimm & Hull) (Reissue.)					
201, 418	Hull, Charles W., et al. (See Scarritt, James, jr., assignor.)	Mar. 19, 1878	630	192	13	521
	Hull, Elias H., Warren, Ohio. Calendar for watches					
200, 049	Hull, Harvey C., et al. (See Scarritt, James, jr., assignor.)	Oct. 15, 1878	658	190	14	588
205, 747	Hull, James B., Live Oak, Fla. Cotton-gin	July 9, 1878	320	93	14	53
	Hull, John S., Cincinnati, Ohio. Blow-pipe					
	Hull, John W. (See Pimm & Hull, administrators) (Reissue.)					
200, 198	Hull, Liverus, Charlestown, Mass. Metallic-beadstead fastening	Feb. 12, 1878	315	94	13	290
202, 032	Same..... Bed-bottom	Apr. 2, 1878	170	49	13	623
205, 748	Same..... Carpet-sweeper	July 9, 1878	322	94	14	53
209, 687	Same..... same	Nov. 5, 1878	164	48	14	703
208, 318	Hull, Nicholas A., assignor of one-half interest to Charles B. Rathbun, Peru, Ind. Table	Sept. 24, 1878	810	236	14	464
	Hull, Selah A. (See Alexander, Thomas S., assignor.)					
200, 657	Hull, Wesley, Fort Wayne, Ind. Spring-hinge for gates, &c.	Feb. 26, 1878	809	238	13	381
203, 273	Hull, William G., Sing Sing, N. Y. Box-loop for harness	May 7, 1878	38	12	13	825
206, 331	Same..... Tug for harness	July 23, 1878	993	282	14	146
204, 575	Hull, William S., Hinds County, Miss. Screw-propeller	June 4, 1878	142	47	13	1033
205, 647	Hull, William S., Jackson, Miss. Flying toy	July 2, 1878	190	57	14	83
8, 439	Hull, Wolcott A., Meriden, Conn. Inkstand	Oct. 1, 1878	218	62	14	518
201, 249	Same..... same	Mar. 12, 1878	435	134	13	486
208, 908	Humbert, Pierre Cessaire, Paris, France. Steam and other turbines	Oct. 15, 1878	499	144	14	567
	Humbert, Le Roy. (See Killian & Humbert.)					
	Hummel, Edwin Maximus. (See Kistner & Hummel.)					
204, 225	Humphrey, Frank A., Worcester, Mass. Nut-cracker	May 28, 1878	1091	311	13	961
204, 973	Humphrey, Henry Judson, Grundy Centre, Iowa, and Luther Carleton, Augusta, Wis. Double-acting pump	June 18, 1878	597	174	13	1096
210, 537	Humphrey, Luther Carleton. (See Humphrey & Carleton.)					
206, 454	Humphrey, Moses, Concord, N. H. Corn-planter	Dec. 3, 1878	160	42	14	844
202, 945	Humphrey, William, Jackson, Mich. Wash-stand for factories, &c.	July 30, 1878	1147	328	14	170
210, 096	Humphrey, William W., Boston, Mass. Curved street-rail	Apr. 30, 1878	1195	345	13	778
198, 175	Same..... Curved railway-rail	Dec. 10, 1878	339	93	14	877
198, 963	Humphreys, Andrew Jackson, Gap Mills, W. Va. Grain-separator	Sept. 17, 1878	646	190	14	440
208, 682	Humphreys, James W., La Fayette, Ind. Ditching-machine	Jan. 8, 1878	272	78	13	58
204, 824	Humphreys, James William, Otterbein, Ind. Ditching-machine	Oct. 8, 1878	243	69	14	529
207, 523	Humphreys, John, New Haven, Conn. Bath for tempering steel	June 11, 1878	418	123	13	1071
200, 237	Humphreys, Silvester E., Leavenworth, Kans. Measuring-can	Aug. 27, 1878	929	273	14	335
210, 124	Humphry, Alexander W., Hiramburg, Ohio. Feed-steamer	Feb. 19, 1878	663	185	13	351
	Hundhausen, Eduard, Buckan, near Madgeburg, Prussia. Kiln for drying vegetables, &c.	Nov. 19, 1878	649	182	14	775
202, 656	Hunkeler, Josef, Saint Louis, Mo. Grinding-machine	Apr. 23, 1878	882	253	13	735
201, 676	Hunt, Alexander Trotter, Arkadelphia, Ark. Cotton cleaner and condenser	Mar. 26, 1878	902	275	13	563
	Hunt, Annie M. (See Hunt, Edmund S., assignor.)					
	Hunt, Charles F. (See Hunt, Walter S. and Charles F.)					
210, 608	Hunt, Charles W., West New Brighton, N. Y. Universal joint for hoisting-blocks	Dec. 10, 1878	249	68	14	865
207, 420	Hunt, Daniel D., Oskaloosa, Iowa. Process for the manufacture of illuminating-gas	Aug. 27, 1878	817	242	14	321
207, 419	Hunt, David F., Burlington, Vt. Fire-escape	Aug. 27, 1878	817	241	14	321
203, 274	Hunt, Edmund S., assignor, by means assignments, to Annie M. Hunt, Weymouth, Mass. Lino-throwing apparatus	May 7, 1878	39	12	13	825
207, 120	Hunt, Elliot S., Elizabeth, N. J. Fastening for gates and doors	Aug. 20, 1878	495	148	14	275
210, 257	Same..... Gate-hinge	Nov. 26, 1878	803	238	14	799
203, 275	Hunt, Frank Henry, Minneapolis, Minn. Coffee-pot	May 7, 1878	40	12	13	826
200, 062	Hunt, Hiram Willie, Brooklyn, N. Y. Labeling plugs of tobacco	Feb. 5, 1878	172	55	13	290
210, 039	Hunt, Howard, Twin Grove, Wis. Automatic sleigh-brake	Nov. 19, 1878	558	167	14	763
202, 172	Hunt, John C., assignor of one-half interest to Daniel Click, Sheridan, Cal. Grain-meter	Apr. 9, 1878	340	99	13	651
200, 724	Hunt, Robert W., and August Wendel, Troy N. Y. Recarburizer for use in the pneumatic process	Feb. 26, 1878	877	.....	13	390
	Hunt, Simon Benton. (See Albertson, Albert, assignor.)					
	Hunt, Thomas H. (See Walker & Hunt.)					
210, 038	Hunt, Walter S. and Charles F., Providence, R. I. Corset	Nov. 19, 1878	557	167	14	762
203, 544	Hunter, Andrew, Rochester, N. Y. Treatment of flour	May 14, 1878	343	98	13	876
	Hunter, Charles A. (See Bayles & Hunter.)					
205, 552	Hunter, Charles E., Fredericksburg, Va. Plow	July 2, 1878	93	26	14	20
200, 725	Hunter, Cyrus, assignor to self and John F. Hunter, Stonewall, Va. Reciprocating steam-engine	Feb. 26, 1878	879	258	13	390
	Hunter, Edmond, A. W. (See Reyburn & Hunter) (Reissue.)					
	Same..... (See Vermilya, Reyburn & Hunter) (Reissue.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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209, 567	Hunter, Edward, Norwich, Conn. Lamp-stove	Nov. 5, 1878	34	10	14	685
209, 688	Hunter, Edward Thomas, Hallsville, Ill. Sulky breaking-plow	Nov. 5, 1878	164	48	14	703
204, 226	Hunter, Frederick George, Moncton, New Brunswick, Canada. Seal-lock	May 28, 1878	1092	311	13	981
8, 285	Hunter, George W., assignor, by mesne assignments, of part interest to Henry M. Baker, William F. Stone, and James H. Vermilya, Washington, D. C. Shuttle for sewing-machine (Reissue)	June 11, 1878	495	143	13	1080
210, 330	Hunter, George W., assignor of one-half interest to Henry M. Baker, Washington, D. C. Sewing-machine shuttle	Nov. 26, 1878	883	260	14	809
203, 154	Hunter, H. (See Hawthorn, William A., assignor.)					
	Hunter, Henry C., and John Everding; said Hunter assignor to Abraham S. Jenks, Philadelphia, Pa. Running-gear for street-cars	Apr. 30, 1878	1402	409	13	806
203, 155	Same. Device for transmitting motion	Apr. 30, 1878	1404	410	13	806
203, 156	Same. Shaft-coupling	Apr. 30, 1878	1405	410	13	806
211, 019	Hunter, James E., assignor to James Hunter & Son, North Adams, Mass. Clutch	Dec. 17, 1878	715	197	14	932
207, 744	Hunter, James M., Greene, N. Y. Horseshoe-calk sharpener	Sept. 3, 1878	162	50	14	370
	Hunter, John F. (See Hunter, Cyrus, assignor.)					
	Hunter & Son, James. (See Hunter, James E., assignor.)					
203, 735	Hunter, William R., assignor to self and M. Van Meredith, East Saginaw, Mich. Safety attachment for hand-satchels	May 14, 1878	536	152	13	900
	Hunting, Leonard. (See Hobbs & Hunting.)					
202, 728	Huntington, Benjamin B., New Richmond, Wis. Gate	Apr. 23, 1878	951	273	13	743
210, 609	Huntington, Frank A., San Francisco, Cal. Ore-washer	Dec. 10, 1878	249	68	14	865
210, 610	Same. Ore-stamp	Dec. 10, 1878	250	69	14	865
205, 005	Huntington, George B., Theresa, N. Y., assignor of one-half interest to Charles H. Houghton, Metuchen, N. J. Book-binding	June 18, 1878	717	213	13	1114
200, 238	Huntley, Holcomb & Hine. (See Holcomb, Abel P., assignor.)					
209, 811	Huntley, Hosea H., Quincy, Ill. Stove-leg	Feb. 10, 1878	664	196	13	351
204, 421	Same. Pattern for casting stove-leg attachments	Nov. 12, 1878	305	91	14	726
	Huntoon, Reuben K., Wakefield, assignor to Allen Governor Company, Boston, Mass. Gas-exhaust regulator	Aug. 27, 1878	818	242	14	321
200, 831	Huntoon, William P., Stuart, Iowa. Reversible pinion for watches	Mar. 5, 1878	18	7	13	417
206, 179	Huntress, John H., Janesville, Wis. Buckle	July 23, 1878	814	232	14	124
	Hunzinger, George. (See Flynt, Chester D., assignor.) (Reissue.)					
200, 302	Huppelsberg, Friedrich W., assignor to Steinborn & Huppelsberg, Brooklyn, N. Y. Machine for covering cord	Feb. 12, 1878	418	125	13	306
200, 303	Same. Double-winged plaited cord	Feb. 12, 1878	419	125	13	306
	Hurd, Lorenzo D. (See Banger & Hurd.)					
205, 390	Hurd, Lorenzo D., Wellsville, N. Y., assignor of one-sixth interest to James Devlin, Williamsport, Pa. Car-truck	June 25, 1878	1040	309	13	1161
201, 529	Hurd, Martin J., Rochester, Minn. Wagon-jack	Mar. 19, 1878	741	226	13	537
	Hurd, Nathan. (See Kidder, George R., assignor.)					
201, 419	Hurd, Oscar P., Binghamton, N. Y. Neck-tie retainer	Mar. 19, 1878	631	193	13	521
200, 309	Hurlbut, Charles A., Ypsilanti, Mich. Saw-gage	Oct. 29, 1878	1041	303	14	649
	Hurlbut, William. (See Moore, Silas Markham, assignor.)					
204, 489	Hurley, Daniel J., Oil City, Pa. Spinning-ring	June 4, 1878	67	23	13	1022
200, 304	Hurrell, William F., jr., Cincinnati, Ohio. Curtain-roller and bracket	Feb. 12, 1878	420	125	13	306
201, 612	Same. Self-binding pulley-block	Mar. 26, 1878	844	256	13	554
201, 788	Hurst, Anthony, and Frederic William Smith, Louisville, Ky. Box-fastener for egg-cases, &c.	Mar. 26, 1878	1015	310	13	580
204, 330	Hurst, John J., and William R. Miller, Baltimore, Md. Manufacture of boots and shoes	May 28, 1878	1197	341	13	995
201, 924	Hussey, Charles A., New York, N. Y. Galvanic battery	Apr. 2, 1878	65	17	13	608
210, 939	Same. Pedal-switch for controlling electric motors	Dec. 17, 1878	625	173	14	921
201, 677	Hussey, Daniel, Lowell, Mass. Speed-indicator	Mar. 26, 1878	902	276	13	564
	Hussey, Thomas H. (See Whitney, Augustus L., assignor.)					
207, 524	Hussey, William L., New Vienna, Ohio. Road-engine	Aug. 27, 1878	930	273	14	335
208, 083	Husted, Jethro B., Vergennes, Vt. Machine for finishing horseshoe-nails	Oct. 8, 1878	244	70	14	529
209, 893	Huston, Charles, Coatesville, Pa., assignor to E. & T. Fairbanks & Co., Saint Johnsbury, Vt. Device for indicating the yielding of a rod or bar under tension	Nov. 12, 1878	388	116	14	737
209, 264	Huston, David, assignor to self, Robert Vose, jr., Boston, and Florentine W. Pelton, Dedham, Mass. Self-leveling berth for vessels	Oct. 22, 1878	892	260	14	625
	Huston, Henry C. (See Connelly & Huston.)					
200, 680	Huston, James Nelson, Connorsville, Ind. Blotter	Nov. 5, 1878	166	49	14	703
208, 098	Huston, William, Victor, Ill. Hog-trap	Sept. 17, 1878	555	166	14	429
205, 368	Huston, William, and Henry N. Wickersham, assignor of one-fourth interest to William G. Pennypacker, Wilmington, Del. Rotary steam-engine	July 9, 1878	451	128	14	70
201, 420	Hutchins, Rush M., et al. (See Howard, William Henry, assignor.)					
	Hutchinson, Frank, and W. H. Graham, Pittsburg, Pa. Utilizing worn-out springs	Mar. 19, 1878	631	193	13	521
	Hutchinson, James R. (See Armstrong, Edward, assignor.)					
199, 831	Hutchinson, Jesse L., Baltimore, Md. Water-closet bowl	Jan. 29, 1878	1168	343	13	214
205, 554	Hutchinson, John A., Chicago, Ill., and Daniel Armstrong, Keeseville, N. Y., assignors to Sheridan Horse Nail Company, Cleveland, Ohio. Machine for forging horse-shoe-nails	July 2, 1878	95	27, 28	14	21
200, 239	Hutchinson, John L., and Henry Dehouck, Elgin, Ill. Watch-plate	Feb. 19, 1878	665	196	13	351
205, 553	Hutchinson, John P., Brooklyn, N. Y. Automatic water-flow regulator	July 2, 1878	94	26	14	21
	Hutchinson, Joseph. (See Stanton & Hutchinson.)					
202, 729	Hutchinson, Samuel, jr., Salem, Mass. Machine-oller	Apr. 23, 1878	952	273	13	743
208, 394	Hutchinson, William S., Chicago, Ill. Steam boiler, furnace, &c.	Sept. 24, 1878	886	258	14	473
	Hutchison, James, et al. (See Flumerfelt, Daniel A., assignor.)					
	Hutchison, Louie K. (See Cheney, Henry O., assignor.)					
	Hutchison, William F., et al. (See Flumerfelt, Daniel A., assignor.)					
206, 022	Hutter, Francis L., Harrisburg, Pa. Index	July 16, 1878	624	180	14	97
	Hutter, Karl. (See Luthy, Adolph, assignor.) (Reissue.)					
206, 455	Hutton, James, Denver, Colo. Felly-joint	July 30, 1878	1148	329	14	170
200, 305	Hutton, James F., Berry Station, Ky. Shuttle for sewing-machines	Feb. 12, 1878	421	125	13	306
201, 613	Hutton, John, Saint Louis, Mo. Utilizing waste heat of furnaces	Mar. 26, 1878	845	256	13	554
208, 243	Hutton, John, jr., Brooklyn, N. Y. Street-car-door opener	Sept. 24, 1878	730	214	14	454
204, 974	Hyams, Hyam J., Pittsburg, Pa. Apparatus for carburizing air	June 18, 1878	508	174, 175	13	1098
	Hyatt, Charles M. (See Hyatt, John W. and Charles M.)					
211, 020	Hyatt, Charles M., Albany, N. Y., assignor to Embossing Company. Clamp	Dec. 17, 1878	717	198	14	932
	Hyatt, Elizabeth A. L., trustee. (See Hyatt, Thaddeus, assignor.)					
	Hyatt, Elizabeth A. L. (See Hyatt, Thaddeus, assignor.) (Reissue.)					
199, 907	Hyatt, John W., Newark, N. J. Slate-frame	Feb. 5, 1878	16	5	13	255

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199, 908	Hyatt, John W., assignor to Celluloid Manufacturing Company, Newark, N. J. Manufacture of sheets of celluloid and other plastic compositions ..	Feb. 5, 1878	17	5, 6	13	235
199, 909	Same..... Manufacture of combs from celluloid .....	Feb. 5, 1878	22	7	13	236
200, 914	Hyatt, John W., Newark, N. J. Pneumatic, hydraulic, or steam-pressure apparatus ..	Mar. 5, 1878	95	32	13	430
201, 347	Same..... Mill for pulverizing .....	Mar. 19, 1878	558	{ 171 172 }	13	511
201, 348	Hyatt, John W., Newark, N. J., and Charles M. Hyatt, Albany, N. Y. Silicious material to imitate ivory and similar substances .....	Mar. 19, 1878	560	.....	13	511
202, 441	Hyatt, John W., Newark, N. J., assignor to Celluloid Manufacturing Company, New York, N. Y. Coating articles with celluloid, &c .....	Apr. 16, 1878	627	184	13	696
203, 834	Same..... Shoe-tip .....	May 21, 1878	651	185	13	922
204, 151	Hyatt, John W., Newark, N. J. Apparatus for grinding and shaping slate .....	May 28, 1878	1010	287	13	971
204, 227	Hyatt, John W., Newark, N. J., assignor to Celluloid Manufacturing Company, New York, N. Y. Apparatus for covering cores and forming tubes of celluloid and other plastic materials .....	May 28, 1878	1093	312	13	981
204, 228	Same..... Producing tubes and hollow articles from celluloid and other plastic materials .....	May 28, 1878	1094	312	13	982
204, 229	Hyatt, John W., and Charles Burroughs, Newark, N. J., assignor to Celluloid Manufacturing Company, New York, N. Y. Apparatus for coating bars or springs with celluloid or other plastic composition .....	May 28, 1878	1095	312	13	982
205, 271	Hyatt, John W., Newark, N. J., assignor to Celluloid Manufacturing Company, New York, N. Y. Manufacture of sheets of celluloid and other analogous plastic compositions .....	June 25, 1878	911	270	13	1145
209, 265	Hyatt, John W., Newark, N. J. Slate-grinding machine .....	Oct. 22, 1878	893	261	14	625
209, 568	Same..... Staining wood .....	Nov. 5, 1878	36	.....	14	685
209, 569	Same..... Wrench .....	Nov. 5, 1878	36	10	14	685
209, 570	Same..... Varnish .....	Nov. 5, 1878	38	.....	14	686
210, 611	Hyatt, John W., Newark, N. J., assignor to Celluloid Manufacturing Company, New York, N. Y. Apparatus and process for the manufacture of nitro-cellulose .....	Dec. 10, 1878	251	69	14	866
210, 612	Hyatt, John W., and John G. Jarvis, Newark, N. J., assignors to Celluloid Manufacturing Company, New York, N. Y. Apparatus for washing paper-pulp .....	Dec. 10, 1878	255	70	14	866
210, 780	Hyatt, John W., Newark, N. J., assignor to Celluloid Manufacturing Company, New York, N. Y. Piano-key .....	Dec. 10, 1878	428	119	14	888
8, 307	Hyatt, Thaddeus, New York, N. Y., assignor to Elizabeth A. L. Hyatt. Illuminating-door for inclosing vaults, areas, cellar-ways, &c .....	June 25, 1878	1123	332	13	1172
8, 363	Hyatt, Thaddeus, assignor to Elizabeth A. L. Hyatt, New York, N. Y. Illuminated basement, basement-extension, sidewalk, roof, &c .....	Aug. 6, 1878	207	66, 67	14	232
206, 112	Hyatt, Thaddeus, New York, N. Y., assignor to Elizabeth A. L. Hyatt, trustee. Composition floor, roof, pavement, &c .....	July 16, 1878	719	{ 207 208 }	14	108
206, 332	Same..... Application of cements, clays, metals, and glass in forming illuminated or other gratings, vaults, covers, roofs, &c .....	July 23, 1878	993	{ 283 284 }	14	146
206, 333	Hyatt, Thaddeus and Theodore, New York, N. Y. Cement and concrete walking-surface .....	July 23, 1878	1000	{ 284 285 }	14	147
206, 571	Hyatt, Thaddeus, New York, N. Y. Mode of covering, lighting, and ventilating areas, vaults, &c .....	July 30, 1878	1272	{ 365 366 }	14	185
210, 423	Hyatt, Theodore. (See Hyatt, Thaddeus and Theodore.) .....	Dec. 3, 1878	35	8	14	828
199, 832	Hyatt, William F., Brooklyn, N. Y. Bolt for fastening doors, &c .....	Jan. 29, 1878	1168	343	13	214
200, 456	Hyde, Anna. (See Hyde, J. Burrows, assignor.) .....	Feb. 19, 1878	584	172	13	339
204, 446	Hyde, Chauncey Delton, Pitcher, N. Y. Folding chair .....	May 21, 1878	876	251	13	950
202, 442	Hyde, Daniel, assignor to William Tetlow, James Lindsay, Daniel Hyde, and William G. Lindsay, Philadelphia, Pa. Bearing for rub-roll shafts .....	Apr. 16, 1878	629	184	13	696
8, 465	Hyde, J. Burrows, assignor to Anna Hyde, New York, N. Y. Underground-telegraph. Hyde, James P. (See McDermott & Hyde.) .....	Oct. 22, 1878	951	277	14	632
203, 622	Hyde, James S., deceased, by William Peet and Marian L. Hyde, administrators and assignors to Thomas W. Clark, Boston, Mass. Construction of railways. (Reissue.) ..	May 14, 1878	415	118	13	885
203, 157	Hyde, Joseph, and Adam Barker, Baltimore, Md. Brick-cleaning machine .....	Apr. 30, 1878	1406	410	13	806
200, 613	Hyde, Marian L., administrator. (See Hyde, James S.) .....	Feb. 26, 1878	759	222	13	373
199, 910	Hyde, Seneca T., Boston, Mass. Steam-generator .....	Feb. 5, 1878	25	.....	13	236
207, 182	Hyde, Thomas W., Bath, Me. Pin-rail for vessels .....	Aug. 20, 1878	558	167	14	283
207, 182	Hyder, Jacob, Fork Mountain, N. C. Process for drying fruit .....	Sept. 24, 1878	887	258	14	474
8, 100	Hydrocarbon Steam Generating Company. (See Browne, William Frank, assignor.) ..	Dec. 10, 1878	256	70	14	866
208, 395	Hyers, Benjamin S., Pekin, Ill. Pipe-wrench .....	Feb. 26, 1878	964	284	13	404
210, 613	Hyers, Samuel A. (See Cole, David S., assignor.) .....	Sept. 24, 1878	887	258	14	474
8, 163	Hyndman, Charles D., et al. (See Sparks, James Henry, assignor.) .....	Dec. 10, 1878	256	70	14	866
205, 272	Hyndman, William G., Cincinnati, Ohio. Securing metal plates to structures. (Reissue) ..	Apr. 9, 1878	498	145	13	673
202, 109	Same..... Cap and anchor for metallic roofing .....	June 25, 1878	912	270	13	1145
210, 781	Same..... Sheet-metal roofing .....	Apr. 9, 1878	867	79	13	641
200, 832	Hyslop, John, jr., Abington, assignor, by mesne assignments, to Hiram H. and George O. Jenkins, South Abington, Mass. Machine for making metallic shoe-shanks. (Reissue) ..	Dec. 10, 1878	429	119	14	888
205, 272	Ibsen, Henry, New York, N. Y. Drop-light .....	Mar. 5, 1878	19	7	13	417
202, 109	Ibsen, Henry James, assignor to self and D. M. Bassett, Birmingham, Conn. Thill-coupling .....	Jan. 22, 1878	866	252	13	159
210, 781	Illi, Richard W., Glen Gardner, N. J. Harvester cutter-bar .....	June 11, 1878	419	{ 124 125 }	13	1072
204, 825	Illingsworth, William, and Carl Zeidler, Bradford, England. Machine for making skeps or other baskets .....	July 30, 1878	1273	366	14	185
206, 572	Illinois Springfield Watch Company. (See Hoyt, Otis, assignor.) .....	Jan. 1, 1878	168	47	13	34
198, 886	Imhauser, Friedrich, Brooklyn, N. Y. Watchman's time-indicator .....	Aug. 6, 1878	142	44	14	224
206, 792	Ingham, George Rex, Quebec, Canada. Milk-cooler .....	Apr. 16, 1878	536	157	13	683
202, 348	Ingalls, Joshua Bigelow, and Richard Clark, Trempealeau, Wis. Horse-collar .....	July 16, 1878	723	208	14	109
206, 113	Ingalls, William Allen, Boston, Mass. Chuck .....	Sept. 17, 1878	647	190	14	440
208, 176	Ingalls, William Allen, Providence, assignor of one-half interest to Henry Whitman, Cranston, R. I. Door-securer .....	Dec. 3, 1878	221	58, 59	14	852
8, 510	Ingersoll, John E., et al. (Hill & Jayne, assignors) .....	.....	.....	.....	.....	.....
	Ingersoll, R. H., Biddeford, Me., assignor to S. McHenry, Woodbury, N. J. Registering-machine .....	.....	.....	.....	.....	.....
	Ingham, E. A. (See Ingham, John Q., assignor.) .....	.....	.....	.....	.....	.....
	Ingham, George. (See Bright, Ingham & Fielding.) .....	.....	.....	.....	.....	.....

*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
200, 614	Ingham, John Q., Elmira, N. Y., assignor to E. A. Ingham, Clinton, Iowa. Window hanging and fastening .....	Feb. 26, 1878	759	223	13	373
207, 872	Inglis, Edward H., Newtown, N. Y. Shirt .....	Sept. 10, 1878	313	95	14	392
207, 280	Inglis, Samuel B., assignor of one-half interest to E. T. Jameson, Pittsburg, Pa. Lamp-chimney .....	Aug. 20, 1878	661	196	14	296
	Ingraham & Company, E. (See Atwood, Anson L., assignor.)					
	Ingram, James E., et al. (See Knapp, George W., assignor.)					
	Inman, Ezekiel. (See Lewthwaite, George Walter, assignor.)					
210, 854	Immis, William J., Oil City, Pa. Throttle-valve for steam-engines .....	Dec. 17, 1878	516	146	14	908
209, 050	Inskeep, Marion, Bellefontaine, Ohio. Middlings-bolt .....	Oct. 15, 1878	660	190	14	588
	International Gas Light Company. (See Slade, James, assignor) .....					
	Iodois & Co. (See Paradis, Joseph, assignor.)					
205, 799	Irean, William, Oak Springs, Iowa. Truss-bridge .....	July 9, 1878	379	109	14	60
201, 879	Ireland, George H., Springfield, assignor to Horace Partridge, Somerville, Mass. Toy ark .....	Apr. 2, 1878	22	6	13	601
203, 459	Ireland, George H., Springfield, Mass. Toy steam fire-engine apparatus .....	May 7, 1878	237	67, 68	13	853
	Ireland, William H. (See Merritt, Henry W., assignor.)					
	Ireland, William H., et al. (See Merritt, Henry W., assignor.)					
200, 306	Irick, John Thomas, Humansville, Mo. Reciprocating churn .....	Feb. 12, 1878	422	126	13	306
207, 037	Irick, Thomas A., Humansville, Mo. Churn .....	Aug. 13, 1878	396	123	14	259
201, 182	Irons, Frank M., Greenville, Mich. Machine for seaming, grooving, and beading metal pipes .....	Mar. 12, 1878	364	113	13	477
200, 726	Irwin, George L., Allegheny, Pa. Apparatus for the manufacture of white lead .....	Feb. 26, 1878	880	258	13	391
206, 573	Irwin, James, Allegheny, Pa. Street-lamp .....	July 30, 1878	1274	366	14	186
	Irwin, John. (See Stevenson, Elisha McCurdy, assignor) .....					
205, 648	Irwin John H., Philadelphia, Pa. Lantern .....	July 2, 1878	191	58	14	33
205, 649	Same .....	July 2, 1878	193	58	14	34
205, 650	Same .....	July 2, 1878	194	58, 59	14	34
205, 749	Same .....	July 9, 1878	322	94	14	53
206, 241	Same .....	July 23, 1878	885	252	14	133
209, 051	Same .....	Oct. 15, 1878	661	191	14	588
209, 266	Same .....	Oct. 22, 1878	897	261	14	625
209, 267	Same .....	Oct. 22, 1878	899	262	14	626
203, 158	Irwin, Samuel W., Columbia, S. C. Feathering paddle-wheel .....	Apr. 30, 1878	1407	410	13	806
	Irwin, Thompson H., assignor of one-half interest to William P. Edwards, Dennison, Ohio. Feed-water heater for locomotives .....	Oct. 15, 1878	576	167	14	577
208, 978	Isaacs, Frederic H., Newark, N. J. Sulky-plow .....					
	Isaacs, John D. (See Cruse & Isaacs.)					
199, 367	Isaacs, William B., San Francisco, assignor of one-half interest to James D. Culp, San Felipe, Cal. Tobacco-drying machine .....	Jan. 22, 1878	682	200	13	130
198, 802	Isbell, Ceylon, and Elhanan C. Taylor, Little York, N. Y. Rotary box-churn .....	Jan. 1, 1878	85	23	13	21
210, 040	Isbell, Charles, Hotchkissville, Conn. Animal-trap .....	Nov. 19, 1878	559	168	14	763
203, 276	Isbell, Charles W., New York, N. Y. Gas-meter .....	May 7, 1878	41	13	13	826
	Iseminger, Daniel H. (See Faloon & Iseminger.)					
200, 457	Iseminger, Daniel H., assignor of one-half interest to Mathew Faloon, Bloomington, Ill. Pneumatic signaling apparatus .....	Feb. 19, 1878	585	173	13	339
208, 099	Iseminger, Daniel H., and Matthew Faloon, Bloomington, Ill. Automatic lighting device .....	Sept. 17, 1878	556	167	14	429
204, 436	Isett, William D., Spruce Creek, Pa. Spinning-frame .....	June 4, 1878	21	7, 8	13	1015
206, 114	Isham, Harry L., Plattsburg, N. Y. Vehicle-axle box .....	July 16, 1878	724	209	14	109
	Isham, John G., et al. (See Lanstrom, Reinhold, assignor.)					
202, 262	Isidor, Moritz, New York, N. Y. Cap and collar combined .....	Apr. 9, 1878	427	125	13	663
200, 865	Iske, Anthony, Lancaster, Pa. Invalid-bedstead .....	Mar. 5, 1878	51	18	13	422
210, 125	Iske, Anthony, assignor to Israel L. Landis, Lancaster, Pa. Invalid-chair .....	Nov. 19, 1878	650	193	14	775
206, 793	Israel, Alexander C., Kimmiswick, Me. Nut-lock .....	Aug. 6, 1878	142	44	14	224
	Ittner, Martin. (See Gamewell, John A., assignor.)					
200, 615	Ivens, Edmund M. and Joseph H. Dorand, New Orleans, La. Cotton-press .....	Feb. 26, 1878	760	223	13	374
202, 110	Ivens, Edmund M., assignor to Emily Louisa Ivens, New Orleans, La. Baling-press follower .....	Apr. 9, 1878	269	79	13	642
	Ivens, Emily Louisa. (See Ivens, Edmund M., assignor.)					
	Ives, Blakeslee & Co. (See Chinnock, Charles E., assignor.)					
	Same .....					
201, 678	Ives, Edward R., assignor to Ives, Blakeslee & Co., Bridgeport, Conn. Toy .....	Mar. 26, 1878	903	276	13	564
208, 396	Ives, Frederic, et al. (See Johnson, Albert W., assignor.)					
211, 021	Ives, Hiram L., Troy, N. Y. Lamp .....	Sept. 24, 1878	888	259	14	474
	Ives, Hiram L., assignor of one-half interest to John S. Saunders, Troy, N. Y. Lamp-burner .....					
	Ives, James. (See Bartram, Aaron A., assignor) .....					
199, 911	Ives, James, Mount Carmel, Conn. Pole-sweep for vehicles .....	Dec. 17, 1878	718	198	14	932
	Ives & Co., W. A. (See Spofford, Nelson, assignor) .....					
202, 548	Ives, William A., New Haven, Conn. Bit-stock .....	Feb. 5, 1878	25	8	13	236
205, 096	Same .....					
210, 126	Iveson, George, Greenwich Station, Ohio. Invalid-bedstead .....	Apr. 16, 1878	750	217	13	710
	Ivy, James M. (See Reid, William Gregg, assignor.)					
206, 734	Jacker, Maximilian, assignor to self and Daniel H. Merritt, Marquette, Mich. Hoisting-machine .....	June 18, 1878	718	213	13	1114
201, 789	Jackman, George W., Bath, N. H. Whiffletree-hook .....	Nov. 19, 1878	651	193	14	775
207, 005	Jackson, Benjamin F., Indianapolis, assignor to self and John J. Shields, Muncie, Ind. Car-door fastening .....	Aug. 6, 1878	77	25	14	216
	Jackson, Byron, Woodland, Cal. Grain-thresher and separator .....	Mar. 26, 1878	1016	310	13	580
206, 456	Same .....	Sept. 3, 1878	20	8	14	352
210, 458	Same .....	July 30, 1878	1149	329, 330	14	170
204, 975	Jackson, Charles, California, Ohio. Bake-pan .....	Dec. 3, 1878	72	18	14	833
	Jackson, Charles S. (See Gilberts & Jackson.)					
199, 443	Jackson, Cornelius L., Millersburg, Ill. Wheel-plow .....	June 18, 1878	599	175	13	1098
	Jackson, Daniel, et al. (See Cabell, Samuel G., assignor) .....					
	Jackson, Dennison W. B., et al. (See White, Charles W., assignor) .....					
	Same .....					
204, 490	Jackson, Edwin A., New York, N. Y. Gas or oil stove .....	Jan. 22, 1878	751	220	13	141
	Jackson, George. (See Flagg & Jackson.)					
200, 063	Jackson, George Fred., assignor to self and C. B. Simpson, Minneapolis, Minn. Chest-protecting vest .....	June 4, 1878	68	23	13	1022
	Jackson, George H., et al. (See Thompson, Samuel R., assignor) .....					
	Jackson, Oliver P. (See Starkey & Jackson.)					
199, 552	Jackson, Oliver P., Pittsburg, Pa. Shaking grate .....	Feb. 5, 1878	173	56	13	260
		Jan. 22, 1878	866	253	13	160



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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr-E	Vol.	Page.
203, 343	Jackson, Peter H., San Francisco, Cal. Sidewalk hatchway and door.....	May 7, 1878	111	32	13	835
	Jackson, S. M., et al. (See King, John G., assignor.)					
203, 918	Jackson, Walter Marsh, Providence, R. I. Car-heater .....	May 21, 1878	738	212	13	933
205, 301	Same..... Gas-stove.....	June 25, 1878	1042	309	13	1161
200, 915	Jackson, William, Millertown, Pa., Barnhart's Mills P. O. Link and cross-head .....	Mar. 5, 1878	96	33	13	430
202, 173	Jackson, William Blake, Minneapolis, Minn. Horse hay-rake .....	Apr. 9, 1878	341	99	13	651
204, 152	Jacobs, Herman F., Weston, Mass. Tuning attachment for piano-fortes .....	May 28, 1878	1012	287	13	971
208, 603	Jacobs, Morris, Fort Clark, Tex. Padlock .....	Oct. 1, 1878	149	43	14	509
203, 835	Jacobsen, Henry Emil, New York, N. Y. Electro-galvanic belt.....	Nov. 21, 1878	651	186	13	922
209, 571	Jacobsohn, Noah, Berlin, Germany. Envelope .....	Nov. 5, 1878	39	10	14	686
201, 530	Jacobson, Christian F., assignor to self and James C. Jones, New York, N. Y., and G. E. Maltby, Norfolk, Va. Machine for making twist-drills .....	Mar. 19, 1878	742	226	13	537
208, 017	Jacobus, Peter N., Newton, N. J. Violin .....	Sept. 17, 1878	478	143	14	418
	Jacobus, S. H. (See Ellwell, Arthur H., assignor.)					
204, 826	Jacques, William W., Newburyport, Mass. Electro-magnetic gas-burner .....	June 11, 1878	422	125	13	1072
	Jacquin, George. (See McDonald, Alvin, assignor.)					
206, 794	Jadwin, Charles P., Scranton, Pa. Curtain-fixture.....	Aug. 6, 1878	143	44	14	224
204, 230	Jaeger, Anthony, Detroit, Mich. Sleeping-car .....	May 28, 1878	1097	313	13	982
8, 509	Jaeger, Gustav L., New York, N. Y. Machine for lining and drying pasteboard. (Re-issue)	Nov. 26, 1878	962	280 281	14	820
200, 307	Jaeger, Gustav L., New York, N. Y. Machine for feeding, pasting, and cutting paper and other fabrics .....	Feb. 12, 1878	423	126	13	304
208, 244	Jagger, William, Horsforth, near Leeds, England. Packing for stuffing-boxes .....	Sept. 24, 1878	731	214	14	454
	James, Aikman & Co. (See Gilbert, John, assignor.)					
208, 738	James, David Brice, Visalia, Cal. On-track railway-car .....	Oct. 8, 1878	301	86	14	536
262, 263	James, John. (See Hardie, James and Cooper.)					
	James, Joseph P. R., Pepin, Minn., assignor to F. H. Bernard, Chippewa Falls, Wis. Fire-escape .....	Apr. 9, 1878	428	125	13	663
210, 538	James, Joseph P. R., Reed's Landing, Minn. Substitute for tobacco .....	Dec. 5, 1878	161	.....	14	844
209, 690	James, Reuben Rodney, Rising Sun, Ind. Adding-machine.....	Nov. 5, 1878	167	49	14	703
199, 553	James, Thomas, Braddocks, Pa. Ingot-mold stripper .....	Jan. 22, 1878	867	254	13	160
200, 727	James, Thomas and Thomas L., Seymour, Conn. Making copper bottoms for domestic boilers .....	Feb. 26, 1878	881	259	13	391
	James, Thomas L. (See James, Thomas and Thomas L.)					
206, 574	James, Stephen H. (See Green, Henry, assignor.)					
	James, William H., Havana, N. Y. Paint .....	July 30, 1878	1275	.....	14	186
	Jameson, E. T. (See Inglis, Samuel B., assignor.)					
206, 457	Jamieson, Henry A., and William Foster, Brooklyn, N. Y., said Jamieson assignor to said Foster. Vertical steam-pump .....	July 30, 1878	1152	330	14	170
207, 281	Jamieson, Willburn W., assignor of one-half interest to J. A. Schell, Foxburg, Pa. Water-packer for oil-wells .....	Aug. 20, 1878	661	196	14	296
204, 576	Jamin, Nicolaus, New York, N. Y. Lid for gas-retort .....	June 4, 1878	143	48	13	1033
198, 648	Jamison, John P., Cambridge, Mass. Art of producing printing-surfaces .....	Jan. 1, 1878	125	36	13	28
8, 153	Janney Car Coupling Company. (See Janney, Eli H., assignor.) (Reissue.)					
	Janney, Eli H., assignor, by mesne assignments, to Janney Car Coupling Company, Alexandria, Va. Car-coupling .....	Apr. 2, 1878	235	68, 69	13	633
207, 183	Janney, Eli H., Alexandria, Va., and Lawrence R. Mathews, Altoona, Pa. Car-platform .....	Aug. 20, 1878	559	167	14	283
207, 525	Janney, Eli H., Alexandria, Va. Car-coupling draw-bar .....	Aug. 27, 1878	931	273	14	335
205, 097	Jannopoulo, Demetrius, Saint Louis, Mo. Feed-bag .....	June 18, 1878	718	213	13	1114
205, 098	Same..... Vehicle-top .....	June 18, 1878	719	214	13	1114
205, 099	Same..... Wagon-cover .....	June 18, 1878	720	214	13	1114
210, 855	Same..... Pulley for awnings .....	Dec. 17, 1878	516	146	14	908
200, 916	Jansen, Charles, New York, N. Y. Vapor-bath .....	Mar. 5, 1878	97	33	13	430
203, 836	Jaques, David L., Cleveland, Ohio. Heating-furnace .....	May 21, 1878	652	186	13	922
207, 184	Jaques, John F., assignor to Dimock, Gould & Co., Moline, Ill. Wash-board .....	Aug. 20, 1878	560	168	14	283
199, 070	Jaquett, Charles A. W., Brooklyn, N. Y. Mill for reducing grain .....	Jan. 8, 1878	356	105	13	72
207, 968	Jardine, John, Glasgow, Scotland, Great Britain, assignor of one-half interest to Curtis O. Luce, Brandon, Vt. Rotary engine .....	Sept. 10, 1878	413	124	14	404
200, 396	Jarecki, Albert H., Erie, Pa. Gage-cock .....	Feb. 19, 1878	528	156	13	830
206, 795	Same..... Pipe-longs .....	Aug. 6, 1878	144	45	14	224
207, 185	Jarecki, Friedrich, Erie, Pa. Hydrant .....	Aug. 20, 1878	560	168	14	283
	Jarecki, Hays & Co. (See McNamara, William, assignor.)					
	Jarecki Manufacturing Company (limited). (See Morse, Thomas G., assignor.)					
	Same..... (See Potter, Joseph B., assignor.)					
206, 334	Jarrell, Edwin, assignor of one-half interest to James T. McKim, Thorntown, Ind. Plow-colter .....	July 23, 1878	1001	285	14	147
202, 825	Jarvis, Samuel E., assignor of one-half interest to E. Bement & Sons, Lansing, Mich. Windmill .....	Apr. 23, 1878	1061	304	13	767
198, 943	Jasper, Gustavus A., Boston, Mass. Refining raw sugar .....	Jan. 8, 1878	234	66	13	51
198, 944	Same..... Apparatus for refining raw sugar .....	Jan. 8, 1878	235	67	13	51
199, 158	Jasper, Wilhelm, assignor of two-thirds interest to Herman and Schamu M. Moschowitz, New York, N. Y. Car-starter .....	Jan. 15, 1878	404	137	13	88
201, 421	Jasper, Wilhelm, Morrisania, assignor of one-half interest to John C. Kelley, Brooklyn, N. Y. Car-starter .....	Mar. 19, 1878	633	193	13	521
208, 521	Jasper, William, and Stephen Boushey, San Francisco, Cal. Hopper for cube-sugar machine .....	Oct. 1, 1878	65	20	14	498
208, 522	Jasper, William, assignor of one-half interest to Stephen Boushey, San Francisco, Cal. Machinery for making cube-sugar .....	Oct. 1, 1878	66	20	14	498
	Jay, David. (See Criaty & Jay.)					
201, 679	Jay, Pierre Eymard, Bethlehem, Pa. Aging liquor .....	Mar. 26, 1878	904	276	13	564
203, 623	Jay, Pierre E., Bethlehem, Pa. Fly-wheel for engines .....	May 14, 1878	416	119	13	885
	Jayne, William H. (See Hill & Jayne) (Reissue.)					
206, 242	Jeannerat, Frank, and Lewis Edward Simons, Edenburg, Pa. Rock-washer for oil-wells .....	July 23, 1878	886	253	14	133
206, 115	Jebb, John Gladwyn, Hall Valley, Colo. Ore-separator .....	July 16, 1878	725	209	14	109
207, 282	Jeffers, James A., Esdaile, Wis. Stump-puller .....	Aug. 20, 1878	662	196	14	296
200, 240	Jeffers, Wallace W. D., Glens Falls, N. Y. Machine for preparing wood for making paper-pulp .....	Feb. 19, 1878	665	196	13	351
210, 201	Jefferson, Thomas E., Boston, Mass. Plow .....	Nov. 26, 1878	748	222	14	792
210, 202	Same..... same .....	Nov. 26, 1878	749	222	14	792
200, 397	Jeffery, Edwin A., Jersey City, N. J. Bed-bottom .....	Feb. 19, 1878	528	156	13	336
	Jeffery, Thomas B. (See Moody, William F., assignor.)					
206, 950	Jeffery, Thomas B., Chicago, Ill. Pen-holder .....	Aug. 13, 1878	314	96	14	249

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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209, 702	Jeffery, Thomas B., Chicago, Ill. Ticket-printing press.....	Nov. 12, 1878	255	78, 77	14	719
209, 616	Jeffords, Charles L., Jamestown, N. Y. Machine for making axes.....	Feb. 26, 1878	761	{ 223 224	13	374
201, 614	Jeffries, Mortimer, Collins, Ind. Gate.....	Mar. 26, 1878	847	257	13	555
199, 647	Jehuke, Arnold. (See Swank & Jehuke.)					
	Jelinek, Anton, Chicago, Ill. Tailor's grinding-machine.....	Jan. 29, 1878	994	289	13	187
	Jelliff, Isaac. (See Kile, Jarvis C., assignor.)					
204, 827	Jenkins, Caldwell C., assignor of one-half interest to Charles B. Lee, West Chester, Pa. Engine-governor.....	June 11, 1878	423	125	13	1072
204, 828	Same..... Steam-engine regulator.....	June 11, 1878	423	126	13	1072
	Jenkins, Charles W. (See Jenkins, Wilton F. and Charles W.)					
203, 736	Jenkins, David, assignor of one-half interest to James Carson, Pittsburg, Pa. Gage-cock for steam-boilers.....	May 14, 1878	537	152	13	900
209, 400	Jenkins, David, Evansville, Ind. Elevator.....	Oct. 29, 1878	1042	303	14	649
	Jenkins, George O., et al. (See Hyalop, John, jr., assignor.) (Reissue.)					
	Jenkins, Henry S., trustee. (See Kimball, Joseph K., assignor.)					
	Jenkins, Hiram H., et al. (See Hyalop, John, jr., assignor.) (Reissue.)					
8, 057	Jenkins, James, Evanston, Wyo. Locomotive-spring.....	Jan. 29, 1878	1220	358	13	221
201, 531	Jenkins, Joel, Brooklyn, N. Y. Skirt-supporter.....	Mar. 19, 1878	744	226	13	537
201, 532	Same..... Stocking-supporter.....	Mar. 19, 1878	744	227	13	537
204, 047	Same..... Brooch-pin.....	May 21, 1878	876	251	13	950
203, 545	Jenkins, Perry S., New Liberty, Ky. Hedge-fence.....	May 14, 1878	344	98	13	876
205, 962	Jenkins, Philip Oscar, Washington, D. C. Electric light.....	July 16, 1878	565	161	14	89
	Jenkins, Raymond. (See Hubbell & Jenkins.)					
	Jenkins, S. G. (See Davis, General, assignor.)					
199, 715	Jenkins, Samuel H., Nashville, Tenn. Punch for metal.....	Jan. 29, 1878	1057	309	13	197
206, 879	Jenkins, William E., Warwick, N. Y. Locking device for can-lids.....	Aug. 13, 1878	244	77	14	241
204, 976	Jenkins, William R., jr., Bellefonte, Pa. Metal-rolling mill.....	June 18, 1878	600	{ 175 176	13	1096
210, 203	Jenkins, Wilton F. and Charles W., Richmond, Va. Plow.....	Nov. 26, 1878	750	222	14	792
8, 180	Jenkinson, George B., Newark, N. J., assignor to George M. Ballard and George Minchin. Trunk-caster frame..... (Reissue.)	Apr. 16, 1878	837	241	13	721
	Jenks, Abraham S. (See Everding, John, assignor.)					
	Same..... (See Hunter, Henry C., assignor.)					
	Jenks, George A. (See Jenks, James, assignor.) (Reissue.)					
	Same..... same.....					
8, 203	Jenks, James, Detroit, Mich., assignor of one-half interest to George A. Jenks. Feeding air to furnaces.....	Apr. 30, 1878	1487	435	13	816
202, 657	Jenks, James, assignor of one-half interest to George A. Jenks, Detroit, Mich. Boiler-furnace.....	Apr. 23, 1878	882	253	13	735
	Jenks, Stephen A. (See Sherman, Albert Read, assignor.)					
	Same..... (See Stearns, Henry A., assignor.)					
	Same..... (See Winsor, Joseph S., assignor.) (Reissue.)					
199, 294	Jenne, William K. (See Clough & Jenne.)					
204, 829	Jenness, Orlando, Boston, Mass. Hat-holder.....	Jan. 15, 1878	506	174	13	109
	Jenney, Walter P., Brooklyn, N. Y. Leather water-proofing compound.....	June 11, 1878	425		13	1072
8, 190	Jennings, Amos W. (See De Cell & Jennings.)					
	Jennings, Augustus and Isaac, Fairfield, Conn. Paper pail..... (Reissue.)	Apr. 23, 1878	1155	332	13	769
	Jennings, Aza. (See Jennings, Benjamin Spencer and Aza.)					
200, 917	Jennings, Benjamin Spencer and Aza, Sullivan, Ill. Device for twisting yarn into hanks.....	Mar. 5, 1878	98	33	13	430
207, 873	Jennings, Frank K., assignor of one-half interest to Phoenix Iron Works Company, Ashtabula, Ohio. Plow.....	Sept. 10, 1878	313	95	14	392
204, 331	Jennings, George, and John L. Robellaz, New Albany, Ind. Machine for sawing stone.....	May 28, 1878	1198	{ 341 342	13	985
	Jennings, Isaac. (See Jennings, Augustus and Isaac.) (Reissue.)					
198, 887	Jennings, Isaac, Fairfield, Conn. Paper-pulp distributor for coating articles.....	Jan. 1, 1878	169	48	13	34
208, 823	Jennings, John, Belfast, Ireland. Piano-stool.....	Oct. 8, 1878	395	112	14	549
209, 481	Jennings, John, jr., Natick, Mass. Cultivator.....	Oct. 29, 1878	1129	329	14	662
	Jennings, M. E. (See Loree, John, assignor.)					
8, 183	Jennings, Ralph S., assignor, by mesne assignments, to New York Filter Company, New York, N. Y. Filter..... (Reissue.)	Apr. 10, 1878	839	242	13	721
203, 837	Jennings, Reuben S., Chicago, Ill. Trading-pit.....	May 21, 1878	654	186	13	922
206, 243	Jennison, Charles R., assignor to Codman & Shurtleff, Boston, Mass. Surgical explorer.....	July 23, 1878	887	253	14	133
199, 445	Jensen, John C., Chicago, Ill. Coffee-percolator.....	Jan. 22, 1878	753	221	13	141
209, 298	Jepson, John, assignor to Meriden Britannia Company, West Meriden, Conn. Covered dish.....	Oct. 22, 1878	900	262	14	626
202, 349	Jerauld, Henry F., and James W. Stolle, Vandalia, Ill. Sulky-plow.....	Apr. 16, 1878	537	157	13	683
203, 159	Jerauld, Herbert A., Watseka, Ill. Gas-burner.....	Apr. 30, 1878	1409	411	13	806
	Jerome, C. C., et al. (See Sleeper, Charles T., assignor.) (Reissue.)					
200, 458	Jerome, Charles C., Chicago, Ill. Stuffing-box for steam-engines.....	Feb. 19, 1878	586	173	13	339
200, 459	Same..... same.....	Feb. 10, 1878	587	173	13	339
209, 052	Jerome, Edgar, Albany, N. Y. Water-level indicator.....	Oct. 15, 1878	663	191	14	588
199, 912	Jerzmanowski, Erazm J., New York, N. Y. Apparatus for the manufacture of gas.....	Feb. 5, 1878	26	8, 9	13	237
204, 437	Same..... Process of manufacturing water-gas.....	June 4, 1878	23		13	1016
	Jessup, Annie V. (See Underwood, Joseph B., assignor.)					
203, 737	Jeter, Henry Malone, Opelika, Ala. Process and compound for preserving food.....	May 14, 1878	538		13	900
209, 812	Jett, John, San Francisco, Cal. Lock.....	Nov. 12, 1878	306	91	14	726
	Jewett & Co., Sherman S. (See Jewett, Josiah, assignor.)					
	Same..... (See Stannard, Gaylord S., assignor.)					
	Jewett & Root. (See Jewett, Sherman S., assignor.)					
198, 768	Jewett, Edgar B., Buffalo, N. Y. Refrigerator.....	Jan. 1, 1878	48	12, 13	13	15
	Jewett, E. M. (See Sangster, Amos W., assignor.)					
	Jewett, George P. (See Webb, William A., assignor.)					
8, 232	Jewett, Jasper S., Sedgwick, Kans., assignor to John E. Goldeworthy, Central Falls, R. I. Gate..... (Reissue.)	May 14, 1878	625	174	13	910
208, 909	Jewett, John C., Buffalo, N. Y. Combined water cooler and filter.....	Oct. 15, 1878	500	144	14	567
203, 546	Jewett, Josiah, assignor to Sherman S. Jewett & Co., Buffalo, N. Y. Elevated-oven cooking-stove.....	May 14, 1878	346	99	13	876
	Same..... Foot-bar and rail for stoves.....	Oct. 15, 1878	665	191	14	588
199, 446	Jewett, Sherman S., assignor to Jewett & Root, Buffalo, N. Y. Wood heating-stove.....	Jan. 22, 1878	754	221		142
202, 826	Jilison, Charles D., and Hudson Smith, Providence, R. I. Lapping for printing-machines.....	Apr. 23, 1878	1062		13	757

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204, 737	Jingels, August, assignor of two-thirds interest to John D. Tinney and David Mayer, Vicksburg, Miss. Bale-tie	June 11, 1878	326	99	13	1061
209, 691	Jenkins, Frederick, Orange, N. J. Hat-box	Nov. 5, 1878	168	49, 50	14	703
203, 838	Jochum, John, and Richard Herrmann, Brooklyn, N. Y. Ornamenting glass with gold, silver, or other metals	May 21, 1878	655	.....	13	922
199, 444	Jacobi, Charles, Ransom, Ill. Match-safe and lamp combined	Jan. 22, 1878	753	221	13	141
200, 308	Johannesen, Lars, Blair, Wis. Automatic wagon-brake	Feb. 12, 1878	426	{ 126 127 }	13	306
204, 738	John, William, Rigdon, Ind. Tire setting and cooling apparatus	June 11, 1878	327	99	13	1061
209, 403	Johns, Alfred L., Fort Wayne, Ind. Harness-pad	Oct. 29, 1878	1045	304	14	649
205, 750	Johns, Henry W., New York, N. Y. Comminuted asphalt for roofing	July 9, 1878	324	.....	14	53
201, 880	Johnson, Albert W., assignor to Edwin F. Mersick, Hobart B. Bigelow, and Frederic Ives, New Haven, Conn. Compressible pump and check valve	Apr. 2, 1878	23	6	13	602
200, 064	Johnson, Alexander S., assignor to self, Edward E. Hedley, and T. Frank Taylor, Philadelphia, Lyman Gleason, Honesdale, Pa., and J. J. Grant, New York, N. Y. Treating artificial stone	Feb. 5, 1878	173	56	13	260
210, 856	Johnson, Alfred C., Plainfield, N. J. Ball-target	Dec. 17, 1878	517	146	14	909
203, 160	Johnson, Alonzo, Springfield, Mass. Spindle-fastener for locks and latches	Apr. 30, 1878	1410	411	13	806
203, 344	Johnson, Andrew, Kewanee, Ill. Camera-shutter	May 7, 1878	112	33	13	835
206, 245	Same. Device for hanging wall-paper	July 23, 1878	889	253	14	133
201, 533	Johnson, Andrew J., and Charles O. Everts, Cleveland, Ohio. Measuring and indicating faucet	Mar. 19, 1878	745	227	13	537
207, 038	Johnson, Andrew J., Cleveland, assignor to Harlow S. and Emily B. Johnson, and William M. Chapman, Ravenna, Ohio. Belt-fastener	Aug. 13, 1878	397	123	14	259
210, 782	Johnson, Asabel Alanson, assignor of one-half interest to Henry D. Washburn, West Union, Iowa. Book-stitching machine	Dec. 10, 1878	430	120	14	888
	Johnson, Benjamin F. (See Woods, Jordan, assignor.)					
204, 830	Johnson, Charles A. (See Lidell, John, assignor.)					
205, 100	Johnson, Charles C., assignor to John N. Patton, Springfield, Vt. Last-block fastener	June 11, 1878	427	126	13	1072
8, 078	Same. Last-pulling machine	June 18, 1878	721	214	13	1115
	Johnson, Charles D., and Levi F. Johnston, Marshalltown, Iowa. Wire fence. (Reissue)	Feb. 12, 1878	497	146	13	317
8, 247	Johnson, Charles F., jr., Owego, N. Y. Fertilizer-sower	May 21, 1878	969	277	13	962
204, 332	Johnson, Charles H. (See Frisbie & Johnson.)					
198, 803	Johnson, Cyrus Franklin, Canton, Ky. Tobacco-hoisting device	May 28, 1878	1190	342	13	905
200, 918	Johnson, Daniel A., Boston, Mass. Thill-coupling	Jan. 1, 1878	86	23	13	21
203, 919	Same. Holder for leather straps	Mar. 5, 1878	98	33	13	430
200, 919	Johnson, Daniel A., assignor of one-half interest to Rufus S. Merrill, Boston, Mass. Metal loop for harness	May 21, 1878	740	212	13	933
201, 422	Johnson, Daniel M., Emerson, Iowa. Plow-regulator	Mar. 5, 1878	99	34	13	430
202, 174	Johnson, Darley Coles, New Providence, N. J. Fence-post	Mar. 19, 1878	634	193	13	521
206, 735	Johnson, David D., United States Army. Loading attachment for ordnance	Apr. 9, 1878	341	100	13	651
	Johnson, Edward, jr. (See Earnshaw, Ono, assignor.)					
	Johnson, Edward J., and Morton E. Mills, Twinsburg, Ohio. Spring bed-bottom	Aug. 6, 1878	79	25	14	217
	Johnson, Emily B., et al. (See Johnson, Andrew J., assignor.)					
	Johnson, F. D. (See Snyder, John F., assignor.)					
206, 880	Johnson, Felix, Paris, Tex. Plow	Aug. 13, 1878	245	77	14	241
204, 153	Johnson, Frank G., New York, N. Y. Lawn-mower	May 28, 1878	1013	288	13	971
204, 740	Same. Slate-frame attachments	June 11, 1878	329	100	13	1061
208, 523	Johnson, Frank G., assignor of one-half interest to Alexander H. Doty, Brooklyn, N. Y. Gas-governor	Oct. 1, 1878	67	20	14	498
210, 426	Johnson, Frank G., Brooklyn, N. Y. Chair back and bottom	Dec. 3, 1878	39	9	14	829
203, 023	Johnson, George Lacon, Octagon, Ind. Hay-loader	July 16, 1878	624	181	14	97
	Johnson, Harlow S., et al. (See Johnson, Andrew J., assignor.)					
204, 438	Johnson, Henry C., et al. (See Peiffer & Richards, assignors) (Reissue.)					
201, 791	Johnson, Iver, and Martin Bye, Worcester, Mass. Revolving fire-arm	June 4, 1878	25	8	13	1016
205, 486	Johnson, James F., Boston, Mass. Carriage-axle box	Mar. 26, 1878	1018	311	13	581
198, 945	Johnson, James J., East Liverpool, Ohio. Refrigerating plug for cans	July 2, 1878	23	7	14	11
	Johnson, James M., assignor of one-half interest to Andrew Parker, Cleveland, Ohio. Collapsible screw-tap	Jan. 8, 1878	236	67	13	52
	Johnson, Jewett R. (See Taylor & Johnson.)					
204, 491	Johnson, Job, Brooklyn, N. Y. Car-brake	June 4, 1878	68	24	13	1022
8, 140	Johnson, John. (See Johnson, Ole and John.)					
	Johnson, John, Brooklyn, assignor to Empire Lubricating Company, New York, N. Y. Lubricating composition for journal-bearings	Mar. 26, 1878	1103	.....	13	592
199, 833	Johnson, John, assignor of one-half interest to James H. Gilbert, Brooklyn, N. Y. Compound for steam-packing	Jan. 29, 1878	1169	.....	13	214
204, 739	Johnson, John, Bloomfield, Cal. Spark-extinguisher	June 11, 1878	328	99	13	1061
204, 897	Johnson, John, Memphis, Tenn. Shovel	June 18, 1878	522	153	13	1088
208, 524	Johnson, John, assignor to self and James H. Gilbert, Brooklyn, N. Y. Composition for journal-bearings	Oct. 1, 1878	68	21	14	498
209, 170	Same. Composition for journal-bearings	Oct. 22, 1878	806	.....	14	612
209, 270	Johnson, John, Brooklyn, N. Y. Rubber packing	Oct. 22, 1878	801	.....	14	626
210, 258	Johnson, John B., Boston, and Harrison Whittemore, Malden, Mass. Signal-box for electric registers	Nov. 26, 1878	804	238	14	799
199, 447	Johnson, John William, Cincinnati, Ohio. Key-retainer	Jan. 22, 1878	754	{ 221 222 }	13	142
203, 161	Same. Key-fastener	Apr. 30, 1878	1411	411	13	807
202, 827	Johnson, Jonathan, Lowell, Mass. Rotary water-meter	Apr. 23, 1878	1063	304	13	757
207, 422	Same. Apparatus for heating buildings	Aug. 27, 1878	819	242	14	321
203, 460	Johnson, Joseph F., Yocum Station, Va. Pen-holder	May 7, 1878	238	68	13	853
209, 894	Johnson, Joseph W., New Britain, assignor to John P. Connell, Kensington, Conn. Sash-fastener	Nov. 12, 1878	389	116	14	737
207, 039	Johnson, Joshua, Williamstown, W. Va. Harrow	Aug. 13, 1878	398	123	14	259
	Johnson, J. Perrin. (See Martin, James, assignor.)					
205, 392	Johnson, Louis J., assignor of one-half interest to Joseph Root, Elk Falls, Kans. Turbine water-wheel	June 25, 1878	1043	309	13	1161
201, 790	Johnson, M. Carlyle, Hartford, Conn. Screw-cutting die	Mar. 26, 1878	1017	311	13	581
204, 048	Same. Die for cutting screw-threads	May 21, 1878	878	251	13	950
8, 222	Johnson, Moses, Lockport, N. Y., assignor, by mesne assignments, to Charles La Dow. Rotary cultivator	May 7, 1878	314	90	13	864
203, 401	Johnson, Moses, Lockport, N. Y. Cultivator	Apr. 30, 1878	1293	375	13	791
202, 048	Johnson, Moses, assignor of one-half interest to Moses C. Richardson, Lockport, N. Y. Cultivator	Oct. 29, 1878	1043	303	14	649
200, 833	Johnson, Nelson, Jasper, N. Y. Securing insertible saw-teeth	Mar. 5, 1878	20	7, 8	13	418

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209, 402	Johnson, Ole and John, Cresco, Iowa. Car-coupling.....	Oct. 29, 1878	1044	304	14	649
199, 071	Johnson, Peter C., Black Hawk, Colo. Hoisting-machine.....	Jan. 8, 1878	357	105	13	72
8, 240	Johnson, Richard P., Wabash, assignor, by meane assignments, to Eli J. Sumner, Mooresville, Ind. Apparatus for drying lumber..... (Reissue.)	May 21, 1878	902	275	13	961
209, 209	Johnson, Robert A., Philadelphia, Pa. Tappet for stamp-rod.....	Oct. 22, 1878	901	262	14	626
204, 977	Johnson, Roice W., Fort Dodge, Iowa. Clutch.....	June 18, 1878	602	176	13	1098
198, 744	Johnson, Samuel, Philadelphia, Pa. Fountain watering-trough for cattle.....	Jan. 1, 1878	15	4	13	11
201, 250	Same..... Tank for stock-car.....	Mar. 12, 1878	436	134	13	486
202, 946	Johnson, Samuel W., West Medford, assignor to self and Charles L. Holbrook, Boston, Mass. Extension-stock for pistols, &c.....	Apr. 30, 1878	1196	345	13	778
	Johnson, Thomas S. (See Burroughs, Winfield S., assignor.)					
	Same..... (See Gray & Johnson.)					
	Johnson, Thomas S., et al. (See Mudge, Carson, assignor.)					
201, 615	Johnson, Toby. (See Hart & Johnson.)					
	Johnson, Walter Claude, and Samuel Edmund Phillips, Charlton, England. Insulators for telegraph-wires.....	Mar. 26, 1878	848	257	13	555
203, 162	Johnson, William D., assignor of one-half interest to Lewis Freese, Elmore, Ohio. Barrel-hoop-cutting machine.....	Apr. 30, 1878	1412	412	13	807
	Johnson, William H. (See Miller & Johnson.)					
206, 244	Johnson, William H., assignor of one-half interest to G. E. Marvine, Delhi, N. Y. Bag-gage-check.....	July 23, 1878	888	253	14	183
	Johnson, W. M. (See Showalter, Isaac, assignor.)					
	Johnson, William S. (See Roper & Mitchell, assignors.)					
199, 913	Johnson, Clark, Rochester, N. Y. Lubricating compound.....	Feb. 5, 1878	28	.....	13	237
203, 839	Same..... Lubricant.....	May 21, 1878	655	.....	13	922
	Johnston & Co., A. M. (See Cormack, George H., assignor.)					
202, 828	Johnston, Edward H., assignor to Wharton Railroad Switch Company, Philadelphia, Pa. Locking device for railway turn-tables, &c.....	Apr. 23, 1878	1065	305	13	758
	Johnston Harvester Company. (See Cooley, Oliver & Sherwood, assignors.)					
	Same..... (See Cooley, Orville, assignor.)					
8, 373	Johnston, James J., Columbiana, Ohio, assignor, by meane assignments, to American Hydrocarbon Gas Company, Pittsburg, Pa. Apparatus for evaporating liquids..... (Reissue.)	Aug. 13, 1878	407	{ 140 141 }	{ 14 14 }	{ 267 267 }
8, 374	Same..... Apparatus for evaporating liquids.....	Aug. 13, 1878	408	141	14	267
209, 813	Johnston, James J., Columbiana, Ohio, assignor of one-half interest to Henry C. Fry, Rochester, N. Y. Jelly-glass.....	Nov. 12, 1878	307	91	14	726
208, 177	Johnston, James K., Saint Louis, Mo. Burglar-alarm.....	Sept. 17, 1878	648	190	14	440
202, 264	Johnston, James M., and Robert Marshall, Pittsburg, Pa. Elevator.....	Apr. 9, 1878	429	125	13	664
200, 398	Johnston, John E., Clark's Hill, Ind. Gate.....	Feb. 19, 1878	529	156	13	330
199, 716	Johnston, Larkin Farley, Pocahton, Ark. Stirrup-suspender for riding-saddles.....	Jan. 29, 1878	1057	309	13	197
206, 576	Same..... Transplanter.....	July 30, 1878	1278	367	14	186
208, 178	Same..... Husking and shelling implement..... (Reissue.)	Sept. 17, 1878	649	191	14	440
207, 526	Johnston, Levi F. (See Johnson & Johnston.)					
200, 241	Johnston, Lyander, Danville, Ill. Fire-place air-heater.....	Aug. 27, 1878	933	274	14	335
205, 555	Johnston, Nathan, Mayfield, N. Y. Horse-detacher.....	Feb. 19, 1878	667	196	13	351
210, 944	Johnston, Osmund M., Brownsville, Pa. Burial-casket.....	July 2, 1878	99	28	14	21
203, 277	Johnston, William H., Philadelphia, Pa. System for detecting and extinguishing gas.....	Dec. 17, 1878	631	175	14	922
205, 273	Johntry, Jacob A., assignor to Edward W. Owen, Brooklyn, N. Y. Dust-shovel.....	May 7, 1878	42	13	13	826
208, 604	Jonas, Moritz, New York, N. Y. Cigar-package.....	June 25, 1878	913	270	13	1145
210, 857	Same..... Cigar-box.....	Oct. 1, 1878	150	44	14	509
200, 482	Jonasson, Bengt A., Warren, Pa. Machine for turning pipes.....	Dec. 17, 1878	518	147	14	909
204, 978	Jones, Andros B., Bayville, assignor to self and Allen D. Howe, Southborough, Mass. Manufacture of boot and shoe soles.....	Oct. 29, 1878	1120	329	14	662
200, 390	Jones, Ansel Daniel, Kirksville, Ky. Riding-saddle.....	June 18, 1878	602	176	13	1099
200, 692	Jones, Batt, Rock Mart, Ga. Harness.....	Feb. 19, 1878	530	156	13	330
200, 242	Jones, Charles, assignor of one-half interest to Henry Riddle, Glen Riddle, Pa. Card-ing-machine.....	Nov. 5, 1878	160	50	14	703
210, 945	Jones, Charles H., Watertown, Wis., assignor of one-half interest to Jenkins Jones, Chicago, Ill. Circular sawing machine.....	Feb. 19, 1878	668	197	13	351
203, 738	Jones, Charles L., James W. Smith, and Henry H. Adams, Gardner, Mass. Cane-shaving machine.....	Dec. 17, 1878	633	175	14	922
204, 577	Jones, Charles W., Vincennes, Ind. Indicator for telephone alarm-bells.....	May 14, 1878	538	152	13	900
205, 274	Jones, Daniel N., Johnston, Pa., assignor of one-half interest to Cambria Iron Com-pany. Apparatus for washing gases.....	June 4, 1878	144	48	13	1033
202, 730	Same..... Blast-furnace.....	June 25, 1878	914	271	13	1145
209, 093	Same..... Gas-check for blast-furnaces.....	Apr. 23, 1878	952	{ 273 274 }	{ 13 13 }	{ 743 743 }
200, 728	Jones, Daniel T., Yellow Springs, Ohio. Washing-machine.....	Nov. 5, 1878	170	50	14	704
200, 728	Jones, David, Youngstown, Ohio. Roll for rolling metals.....	Jan. 22, 1878	683	200	13	130
204, 231	Jones, David William, Pocahton, Ark. Rotary valve.....	Feb. 26, 1878	882	259	13	391
200, 310	Jones, Dudley E. (See Smith, Samuel, assignor.)					
207, 121	Jones, Edward C., Warrensburg, Mo. Invalid-chair.....	May 28, 1878	1097	313	13	982
200, 309	Jones, Evan J., assignor, by meane assignments, to Eureka Blast Company, Indianapo-ly, Ind. Device for supplying steam and air blast to furnaces.....	Feb. 12, 1878	427	{ 127 128 }	{ 13 13 }	{ 307 307 }
204, 979	Jones, Ezekiel P., Greensborough, N. C., James D. Macomber, Auburn, N. Y., and Joshua P. McCook, Richmond, Va. Plug-tobacco machine.....	Aug. 20, 1878	496	149	14	275
204, 049	Jones, George F., Morgan, assignor of one-half interest to John A. Dushane, Baltimore, Md. Doctor for paper-machines.....	Feb. 12, 1878	426	127	13	307
201, 616	Jones, George H., Rochester, N. Y. Manufacture of boots and shoes.....	June 18, 1878	603	176	13	1099
202, 033	Jones, G. M., et al. (See Smalstig, William C., assignor.)					
	Jones, George W., Farmington, Ky. Churn-motor.....	May 21, 1878	879	252	13	931
	Jones, Henry Lucius, Buffalo, N. Y. Iron fence.....	Mar. 20, 1878	848	257	13	555
	Jones, Henry M., et al. (See Mentzer, William G., assignor.)					
	Jones, Hezekiah C., Winona, Minn. Door-spring.....	Apr. 2, 1878	171	50	13	624
	Jones, Horace K. (See Parker & Jones.)					
	Jones, James C., et al. (See Jacobson, Christian F., assignor.)					
	Jones, Jenkins. (See Jones, Charles H., assignor.)					
809, 243	Jones, John, Llandble, Carmarthenshire, South Wales, assignor to Richard Davis, San Francisco, Cal. Apparatus for cleansing ships' bottoms, &c.....	Oct. 29, 1878	986	287	14	640
199, 809	Jones, John E., assignor of one-half interest to William A. Peall, Philadelphia, Pa. Ship's water-closet.....	Jan. 22, 1878	663	200	13	130
202, 265	Jones, John P., Gold Hill, Nev. Congealing-plate for ice-machine.....	Apr. 9, 1878	430	126	13	664
204, 741	Jones, John W. (See Stewart & Jones.)					
	Jones, Joshua W., Harrisburg, Pa. Book-binder's dry-press and sheet-tie.....	June 11, 1878	329	100	13	1061
	Jones & Laughlins. (See Alker, John H., assignor.)					

*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
202, 266	Jones, Lewis, Wheeling, W. Va. Pile for rerolling old rails.....	Apr. 9, 1878	432	126	13	664
208, 319	Jones, Melville D., Boston, Mass. Bracket.....	Sept. 24, 1878	811	237	14	464
199, 207	Jones, Nathaniel, Syracuse, N. Y. Car-axle.....	Jan. 15, 1878	513	151	13	96
199, 208	Same..... same.....	Jan. 15, 1878	514	151	13	96
201, 881	Same..... same.....	Apr. 2, 1878	24	6	13	602
210, 783	Same..... same.....	Dec. 10, 1878	431	120	14	889
198, 745	Jones, Owen. (See Marston, Frank W., assignor.)					
	Jones, Owen, and Frank W. Marston, Philadelphia, Pa. Extractor for revolving fire-arms.....	Jan. 1, 1878	15	4	13	11
199, 717	Same..... Cartridge.....	Jan. 29, 1878	1058	309	13	197
200, 794	Jones, Owen, Philadelphia, Pa. Revolving fire-arm.....	Feb. 26, 1878	941	277	13	401
210, 858	Jones, Phineas, Newark, N. J. Hub-mortising machine.....	Dec. 17, 1878	519	147	14	909
203, 461	Jones, Richard W., Syracuse, N. Y. Snap-hook.....	May 7, 1878	238	68	13	853
209, 054	Jones, Samuel E., Nashville, Tenn. Mold for casting andirons.....	Oct. 15, 1878	666	191	14	588
208, 739	Jones, Samuel N., Rockford, Ill. Pump.....	Oct. 8, 1878	302	86	14	537
209, 124	Jones, Theodore R., Utica, N. Y. Bed-bottom.....	Oct. 22, 1878	758	220	14	606
205, 556	Jones, Thomas D., Syracuse, N. Y. Millstone-dress.....	July 2, 1878	100	29	14	21
199, 648	Jones, Thomas L., Natchez, Miss. Steam-generator.....	Jan. 29, 1878	955	289	13	187
206, 575	Jones, Thomas M., Kansas City, Mo. Dredging-machine.....	July 30, 1878	1275	366	14	186
201, 792	Jones, Thomas William, jr., London, England. Neck-tie fastener.....	Mar. 26, 1878	1019	311	13	581
	Jones, Washington. (See Leavitt & Jones.)					
201, 534	Jones, Whitfield E., Brooklyn, N. Y. Spring-head for picture-nails.....	Mar. 19, 1878	746	227	13	537
205, 190	Jones, William, Pittsburg, Pa. Link-bending machine.....	June 25, 1878	827	245	13	1134
209, 055	Jones, William, Oshawa, Ontario, Canada. Shutter-worker.....	Oct. 15, 1878	666	192	14	589
S, 427	Jones, William R., Braddock, Pa. Process and apparatus for compressing ingots while casting..... (Reissue)..	Sept. 24, 1878	956	280	14	482
208, 605	Same..... Ingot-mold.....	Oct. 1, 1878	151	44	14	509
	Jones, William T. (See Pooler & Jones.)					
207, 745	Jonte, Pierre F., Cincinnati, Ohio. Treadle-movement for sewing-machines.....	Sept. 3, 1878	163	50	14	370
200, 199	Jordan, August C., Pittsburg, Pa. Machine for forming chains and like articles.....	Feb. 12, 1878	316	94, 95	13	290
198, 984	Jordan, Charles, Wakefield, Mass. Corset-steel.....	Jan. 8, 1878	274	79	13	58
200, 729	Jordan, Robert James, and James Henry Barron, Bowenville, Ga. Manure and guano distributor.....	Feb. 26, 1878	882	259	13	391
201, 882	Jordan, Robert K., Oakland, Cal. Marsh-shoe.....	Apr. 2, 1878	24	6	13	602
201, 017	Jordan, Thomas B., London, England. Machine for drilling or boring rocks.....	Mar. 5, 1878	195	62, 63	13	445
211, 022	Jordan, Thomas B. and Thomas R., London, England. Rock-drill.....	Dec. 17, 1878	719	198	14	932
209, 404	Jordan, Thomas Norbert, Mobile, Ala. Saw-tiling machine.....	Oct. 29, 1878	1046	304	14	649
	Jordan, Thomas R. (See Jordan, Thomas B. and Thomas R.)					
199, 718	Jordan, William, Waterville, Me. Packing-case.....	Jan. 29, 1878	1058	310	13	197
	Jørgensen, Frederik Julius. (See Schröder & Jørgensen.)					
206, 458	Jory, Hugh Stephens, Salem, Oreg. Harrow-hinge.....	July 30, 1878	1153	330	14	170
205, 487	Josel, Francis E., assignor of one-half interest to Hiram Bright, Freeport, Ill. Corn-planter.....	July 2, 1878	23	8	14	12
204, 333	Josias, Joshua M., New York, N. Y. Sprinkler.....	May 28, 1878	1200	342	13	995
202, 350	Joslyn, Benjamin F., Worcester, assignor to Daniel B. Wesson, Springfield, Mass. Revolving fire-arm.....	Apr. 16, 1878	538	158	13	683
202, 351	Same..... same.....	Apr. 16, 1878	539	158	13	683
204, 334	Same..... same.....	May 28, 1878	1201	342	13	995
204, 335	Same..... same.....	May 28, 1878	1202	343	13	995
204, 336	Same..... Extractor for revolving fire-arms.....	May 28, 1878	1203	343	13	996
204, 337	Same..... same.....	May 28, 1878	1203	343	13	996
198, 985	Joslyn, Matthew H., Rochester, N. Y. Band-cutting feeder for thrashing-machines.....	Jan. 8, 1878	274	79	13	58
205, 751	Jonett, James Edward, and William Bainbridge Hoff, Washington, D. C. Safety-buoy	July 9, 1878	325	94	14	53
	Jourdain, Armand. (See Milné & Jourdain.)					
199, 209	Jourdes, Fabien, Paris, France. Antiseptic composition.....	Jan. 15, 1878	514	.....	13	96
	Joy, A. K. P., et al. (See Shackleton & Binns, assignor.)					
	Joy, James P. (See Macardie, George, assignor.)					
209, 895	Joy, Thaddens C., Titusville, Pa. Steam-boiler.....	Nov. 12, 1878	390	116	14	737
209, 244	Joyce, Jacob O. (See Goodwin, Simeon A., assignor.)					
210, 946	Joyce, Jacob O., Dayton, Ohio. Lifting-jack.....	Oct. 29, 1878	988	287	14	640
205, 101	Same..... same.....	Dec. 17, 1878	634	175	14	923
208, 740	Joyce, Joseph L., New Haven, Conn. Window-sash.....	June 18, 1878	721	215	13	1115
208, 606	Same..... Boot and shoe.....	Oct. 8, 1878	302	87	14	537
211, 023	Joyce, Samuel J., New York, N. Y. Sash-cord fastener.....	Oct. 1, 1878	152	44	14	509
202, 423	Jubb, John P., Fayette, Mich. Horseshoe.....	Dec. 17, 1878	721	198	14	933
201, 680	Judd, Grant, Stamford, Conn. Vehicle-spring.....	Aug. 27, 1878	821	243	14	322
201, 681	Judd, Hubert L., Brooklyn, N. Y. Picture-hook.....	Mar. 26, 1878	905	276	13	564
201, 682	Same..... Picture-nail.....	Mar. 26, 1878	905	277	13	564
200, 658	Same..... Curtain-bracket.....	Mar. 26, 1878	906	277	13	564
	Judd, John E., New York, N. Y. Combined clasp and buckle.....	Feb. 26, 1878	810	238	13	381
	Judson, A. A. (See George, Charles F., assignor.)					
8, 096	Judson, De Witt W. (See Weaver & Judson.)					
206, 796	Judson, Lyman P., Rose, N. Y., assignor to Jacob Brinkerhoff. Fence..... (Reissue)..	Feb. 19, 1878	737	216	13	362
	Judson, William W., Kansas City, Mo. Lamp-chimney.....	Aug. 6, 1878	145	45	14	224
	Judy, A. M. (See Le Mar, Oliver W., assignor.)					
	Juengst, Charles A. (See Juengst, George and Charles A.)					
	Juengst, George. (See Crosby, Hagen & Juengst.)					
209, 970	Juengst, George and Charles A., assignor of one-half interest to Charles Bernhard, New York, N. Y. Meat-chopper.....	Nov. 19, 1878	482	146	14	753
209, 971	Juengst, George, and Charles Bernhard, New York, N. Y. Fire-escape.....	Nov. 19, 1878	484	147	14	753
				148		
207, 122	Julien, John, Dubuque, Iowa. Expanding-drill for boring blast-holes.....	Aug. 20, 1878	498	150	14	275
198, 922	June, David. (See Brayton, June & French.)					
	June, Frank T., Chicago, Ill. School-desk.....	Jan. 1, 1878	206	58	13	40
211, 024	Justice, Philip S. (See Beck, George, assignor.)					
8, 234	Justus, William R., Chartiers, and William D. Young, Pittsburg, assignors to Shoenberger & Co., Pittsburg, Pa. Machine for rolling horseshoe-bars.....	Dec. 17, 1878	722	199	14	933
	Kachelman, John, jr., Evansville, Ind. Perpetual time and interest calculator. (Re-issue).....	July 16, 1878	778	223	14	115
201, 617	Same..... Perpetual time and interest calendar.....	Mar. 26, 1878	849	258	13	555



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205, 393	Kade, Charles, Saint Louis, Mo. Table.	June 25, 1878	1045	310	13	1162
208, 397	Kaefer, Mathaus, Philadelphia, Pa. Converting motion.	Sept. 24, 1878	889	250	14	474
207, 283	Kaestner, Charles, Chicago, Ill. Mash-rake.	Aug. 20, 1878	663	196	14	296
202, 947	Kietner, Gustav Adolph, Plagwitz, Leipzig, Germany. Pad for horses' feet.	Apr. 30, 1878	1197	345	13	778
204, 578	Kahler, Conrad, Chicago, Ill. Newspaper-folding machine.	June 4, 1878	145	48, 40	13	1033
199, 072	Kahlke, Henry W. (See Tower & Kahlke.)					
210, 859	Kain, William H., assignor of one-half interest to John Q. A. Ziegler, Philadelphia, Pa. Brick-machine.	Jan. 8, 1878	358	106	13	72
	Kaiser, Augustus C., and Hans H. Stangaard, assignors of one-third interest to Samuel Robinson, Sycamore, Ill. Horse hay-rake.	Dec. 17, 1878	520	147	14	909
	Kaiser, Frank. (See Squires & Kaiser.)					
207, 040	Kalb, Absalom J. (See Rotachka & Davis, assignors.)					
206, 797	Kammerer, Frederick, Somerville, Mass. Carpet-sweeper.	Aug. 13, 1878	398	124	14	259
206, 335	Kamp, Jacob C., and Charles Brown, New York, N. Y. Baling cut hay.	Aug. 6, 1878	146	45	14	224
199, 210	Kampf, George. (See Ortman & Kampf.)					
	Kampf, George, Utica, N. Y. Chain-link.	July 23, 1878	1002	285	14	147
190, 970	Kane, Frederick L., Brooklyn, assignor to Warren Chemical and Manufacturing Company, New York, N. Y. Fire-proof roof and floor.	Jan. 15, 1878	515	151	13	96
204, 492	Kann, Isidor, New York, N. Y. Hair-crimper.	Feb. 5, 1878	88	29	13	247
208, 271	Kanouse, Charles O. (See Sanborn, Kanouse & Sanborn.)					
208, 741	Kaplan, Abe O., Cincinnati, Ohio. Satchel-desk.	June 4, 1878	69	24	13	1022
208, 741	Kappelhoff, John H., Philadelphia, Pa. Muff.	Oct. 22, 1878	903	263	14	626
208, 741	Karback, Charles I., et al. (See Moody, Henry S., assignor.)					
201, 251	Karel, Ignatz, Earth City, Minn. Grain-binder.	Oct. 8, 1878	303	87, 88	14	537
208, 607	Karna, David H., Williamsport, Md., and John Ream, Bedlington, W. Va. Grain cleaner and scourer.	Mar. 12, 1878	437	134, 135	13	487
200, 400	Kase, Simon P., Philadelphia, Pa. Reflector.	Oct. 1, 1878	152	44	14	509
208, 398	Kaselowsky, Emil, Berlin, Prussia. Car-wheel.	Feb. 19, 1878	531	157	13	331
	Kasson, Joseph M. (See Eddy & Kasson.)					
208, 398	Kast, Caroline R., et al. (See Kast, Gustavus, assignor.)					
209, 125	Kast, Gustavus, assignor to U. Klinch and Caroline R. Kast, Detroit, Mich. Trunk-hinge and corner-iron.	Sept. 24, 1878	890	259	14	474
207, 527	Katen, George B., assignor of one-half interest to Duncan F. Blount, New York, N. Y. Curtain-cord tightener.	Oct. 22, 1878	759	220	14	606
204, 154	Katz, William, Philadelphia, Pa. Bandelore toy.	Aug. 27, 1878	934	274	14	335
205, 651	Kaufman, Jacob, Miamisburg, Ohio. Tide-bar vehicle.	May 28, 1878	1014	288	13	971
206, 881	Kauffle, Henry A., Lansdale, Pa. Car-propelling device.	July 2, 1878	196	59	14	34
199, 719	Kaufmann, Bertha, assignor of one-third interest to Leopold J. Speer, Philadelphia, Pa. Wash-board.	Aug. 13, 1878	246	78	14	241
204, 980	Kaufmann, Leopold, New York, N. Y. Cigar-box.	Jan. 29, 1878	1059	310	13	197
206, 675	Kaufmann, Michael. (See De Mounie, Amédée Thornton, assignor.)					
209, 572	Kautz, George J., Emporium, Pa. Log-turner.	June 18, 1878	604	177	13	1099
209, 171	Kay, William Edward, Brooklyn, N. Y. Sash-balance.	Aug. 6, 1878	19	6	14	209
203, 543	Kay, William V., Lake Forest, Ill. Packing for journal-box.	Nov. 5, 1878	40		14	686
203, 050	Kay, Zachous Lee, San Diego, Cal. Ore-stamp.	Oct. 22, 1878	867	234	14	612
203, 920	Kaylor, Joseph, Pittsburg, Pa. Invalid-bedstead.	Feb. 19, 1878	668	197	13	352
207, 810	Kean, Frank H., Cincinnati, Ohio. Shoe-brush.	Apr. 30, 1878	1295	376	13	791
	Kean, Henry, East Boston, Mass. Lathe for turning masts and spars.	May 21, 1878	740	213	13	933
	Keen, Henry, Kinnickinnic, Wis., and James G. Alexander, Boston, Mass. Hanging circular saws.	Sept. 10, 1878	242	75	14	383
201, 683	Kearney & Wiggers. (See Wiggers & Wesseler, assignors.)					
199, 370	Kearney, William F., Michigan City, Ind. Packing for stuffing-boxes, &c.	Mar. 26, 1878	906	277	13	564
203, 921	Kearns, Isaac F., Chicago, Ill. Tinware.	Jan. 22, 1878	684	201	13	130
199, 554	Kearns, Edward G. and Leonzo, Spring Valley, N. Y. Dental gold-filling.	May 21, 1878	742	214	13	984
205, 275	Keating, Leonzo. (See Keating, Edward G. and Leonzo.)					
204, 051	Keating, John M., Memphis, Tenn. Ventilating railway-cars and ships.	Jan. 22, 1878	868	254	13	180
	Keating, Thomas F. (See Towne & Keating.)					
204, 051	Keating, Thomas F., New York, N. Y. Time-lock.	June 25, 1878	914	271	13	1145
206, 456	Keats, John. (See Silver, Edwin, assignor.)					
202, 352	Keck, Jacob M., assignor of one-half interest to John H. Harner, Philadelphia, Pa. Sash-fastener.	May 21, 1878	881	252	13	951
202, 352	Keefe, James, Port Eads, La. Dredge.	July 23, 1878	890	254	14	133
202, 353	Keefe, William J., Boston, Mass. Machine for the manufacture of paper boxes from pulp.	Apr. 16, 1878	540	158	13	683
209, 272	Same. Mechanism for pressing and finishing hollow articles of paper-pulp.	Apr. 10, 1878	542	158	13	683
209, 814	Keefer, Calvin M., and Robert S. Orsburn, Newcastle, Pa. Magic lantern for street-lamps.	Oct. 22, 1878	903	263	14	636
207, 661	Keefer, William S., Newcastle, Pa. Clothes-line stretcher.	Nov. 12, 1878	308	92	14	726
205, 394	Keefe, Richard O., Omaha, Neb. Hoisting-jack.	Sept. 3, 1878	79	24	14	359
204, 338	Keeler, Edward L., assignor to Joseph Graff, Beaver Falls, Pa. Machine for forming the eyes of hoops.	June 25, 1878	1046	310	13	1162
202, 267	Keeler, Kittie Elizabeth, Apulia, N. Y. Sad-iron stand.	May 28, 1878	1204	343	13	996
199, 295	Keeler, Sanford, East Saginaw, Mich., assignor of one-half interest to W. J. Watson, Chicago, Ill. Seal-fastening.	Apr. 9, 1878	433	126	13	664
209, 763	Keeler, William H., Buffalo, N. Y. Hand-stamp.	Jan. 15, 1878	597	174	13	109
202, 829	Keely, Oliver B., et al. (See Quigg, Lewis, assignor.)	Nov. 12, 1878	258	77	14	720
208, 170	Kennan, William, assignor to self and Nicholas B. Hooper, Brooklyn, N. Y. Hat-pouncing machine.	Apr. 23, 1878	1066	305	13	758
208, 180	Keene, Fred. A., and Cyrian Van Order, Marengo, Iowa. Wagon-brake.	Sept. 17, 1878	650	191	14	440
206, 577	Keep, James M., Jersey City, N. J., assignor to George Selden, Erie, Pa. Cigar-lighter.	Sept. 17, 1878	651	191	14	441
	Keer, Edward C. (See Kirby, James A., assignor.)	Mar. 19, 1878	635	194	13	521
	Keidel, Henry, et al. (See Andrews, Thomas B., assignor.)	July 30, 1878	1279	367	14	186
205, 869	Keighton, Walter B., Philadelphia, Pa. Envelope.	July 9, 1878	453	129	14	70
205, 557	Keil, Francis, New York, N. Y. Latch.	Nov. 12, 1878	309	92	14	726
200, 311	Keim, Samuel, Altoona, Pa. Millstone-dress.	July 2, 1878	101	29	14	21
	Keim, Simon J., assignor of one-half interest to William Younger, Catawauqua, Pa. Car-coupling.	Feb. 12, 1878	429	128	13	307
203, 345	Same. Lard and fruit press and sausage-stuffer.	May 7, 1878	113	33	13	835
208, 824	Same. Planter, cultivator, and fertilizer-distributor.	Oct. 8, 1878	396	112	14	549
208, 825	Same. Seed-dropper.	Oct. 8, 1878	397	113	14	549

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207, 424	Keiser, Andrew, assignor of one-half interest to Cole Brothers, Prophetstown, Ill. Sand-band for vehicle-axles .....	Aug. 27, 1878	821	243	14	322
209, 126	Keith, Jeremiah, Providence, R. I. Wax-thread sewing-machine .....	Oct. 22, 1878	760	{ 220 221 }	14	607
209, 050	Keith, Nathaniel S., Brooklyn, N. Y. Refining impure lead .....	Oct. 15, 1878	667	49	14	589
198, 746	Keith, Samuel N., Providence, R. I. Car-coupling .....	Jan. 1, 1878	17	4	13	11
198, 915	Keith, Thomas K., assignor to Moses How, Haverhill, Mass. Feeding mechanism for sewing-machines .....	Jan. 1, 1878	199	56	13	39
204, 579	Same..... Feed-operating mechanism for sewing-machines .....	June 4, 1878	148	49	18	1034
201, 793	Kelleher, Daniel, New Bedford, Mass. Bomb-lance .....	Mar. 26, 1878	1020	{ 811 812 }	13	581
201, 794	Same..... same .....	Mar. 26, 1878	1021	812	13	581
8, 413	Keller, Frank, and Charles Frey, New York, N. Y. Design for jewelry-base. (Reissue.)	Sept. 10, 1878	406	140	14	412
	Keller, Isaac B. (See Sprecher & Keller.)					
8, 343	Keller, John F., Hagerstown, Md., assignor to Hagerstown Agricultural Implement Manufacturing Company. Seeder .....	July 23, 1878	1062	304	14	155
8, 344	Same..... same .....	July 23, 1878	1062	305	14	155
200, 544	Keller, Moses A., Littlestown, Pa. Grain-binder .....	Feb. 19, 1878	609	{ 197 198 }	13	352
207, 123	Keller, Moses A., assignor of one-half interest to W. J. Englebeck, Fremont, Ohio. Grain-binder .....	Aug. 20, 1878	499	150	14	276
309, 059	Keller, Moses A., assignor of one-half interest to Winfield J. Englebeck, Fremont, Ohio. Grain-binder .....	Oct. 15, 1878	670	{ 192 193 194 }	14	589
202, 268	Keller, Wilmer L., Baltimore, Md. Measuring-stopper for bottles .....	Apr. 9, 1878	433	126	13	664
	Kelley, John C. (See Jasper, Wilhelm, assignor.)					
204, 052	Kelley, Joseph F., Washington, D. C. Motor for street-cars .....	May 21, 1878	881	{ 252 253 }	13	951
205, 558	Kelley, Walter S., North Weare, N. H. Stop-motion for drawing-frames .....	July 2, 1878	102	29	14	22
207, 284	Kelley, William, Baltimore, Md. Signal for locomotive head-lights .....	Aug. 20, 1878	664	197	14	296
209, 405	Same..... same .....	Oct. 29, 1878	1046	304	14	650
204, 671	Kelley, William E., Coldwater, Mich. Cotton-seed drill .....	June 11, 1878	255	79	13	1052
199, 680	Kelley, William H., Cleveland, Ohio. Bottle-stopper .....	Feb. 5, 1878	88	29	13	247
208, 181	Kelling, Frederick A., et al. (See Cziner, Matyas, assignor.)					
205, 395	Kellogg, Ansel N., Chicago, Ill. Means for holding stereotype-plates .....	Sept. 17, 1878	652	191	14	441
	Kellogg, Daniel W., assignor of one-half interest to William A. Kirby, Auburn, N. Y. Reciprocating engine .....	June 25, 1878	1047	310	13	1162
8, 127	Kellogg, J. Kensett. (See Morrison & Hubbard, assignors.)					
302, 948	Kellogg, William H. (See Wilson, Elias L., assignor.)					
	Kells, Philip H., Adrian, Mich. Brick-machine .....	Mar. 19, 1878	807	246	13	545
	Same..... Brick and tile machine .....	Apr. 30, 1878	1198	346	13	778
209, 483	Kelly, Daniel K. (See Scribner, James F., assignor.)					
207, 285	Kelly, Edward, Baby's Point, Ontario, Canada. Hair-pin .....	Oct. 29, 1878	1130	330	14	662
	Kelly, Edward J., assignor to self and Wilson Miller, Allegheny, Pa. Core for casting ingot-molds .....	Aug. 20, 1878	665	197	14	297
202, 269	Kelly, Henry, Osage, Iowa. Harvester .....	Apr. 9, 1878	434	127	13	664
199, 649	Kelly, James, San Francisco, Cal. Device for operating windows and transoms .....	Jan. 29, 1878	996	290	13	187
	Kelly, James R. F. (See Stridinger, Kelly & Korrow.)					
	Kelly, Joseph F. (See Smith, Henry, assignor.)					
208, 399	Kelly, Michael, New York, N. Y. Wire fence .....	Sept. 24, 1878	891	260	14	474
203, 464	Kelly, Richard A., Manchester, Iowa. Nut-lock .....	May 7, 1878	241	69	13	853
	Kelman, Alexander. (See Sarilla & Kelman.)					
	Kelsey, Edwin. (See Dawn & Kelsey.)					
205, 870	Kelsey, George R., West Haven, Conn. Buckle .....	July 9, 1878	453	129	14	70
203, 462	Kelso, James P., Morgantown, Ind. Automatic fly-brush .....	May 7, 1878	219	68	13	853
201, 018	Kelter, Michael, and Peter Leickner, McHenry, Ill. Gate .....	Mar. 5, 1878	197	63	13	445
204, 898	Keltner, John M., Salisbury, Ill. Hog-cholera compound .....	June 18, 1878	523	13	1088	
205, 396	Kemble, Thomas H., et al. (See Hansell, Jacob, assignor.)					
199, 371	Kemmel, Gottlieb, Summit, Mich. Automatic wagon-brake .....	June 25, 1878	1048	310	13	1162
8, 254	Kemmerer, Charles P., Drums, Pa. Feed-regulator for millstones .....	Jan. 22, 1878	685	201	13	130
198, 646	Kemp, Joseph Sargent, Magog, Canada. Manure-spreader .....	May 28, 1878	1286	366	13	1006
210, 204	Kemp, Thomas P., Lawrence, Mass. Guard for harness-buckles .....	Jan. 8, 1878	237	67	13	52
	Kempner, Adolphe, Chicago, Ill. Plastic composition for the manufacture of aquarium-frames .....	Nov. 26, 1878	751	223	14	792
210, 331	Kempner, Joseph, Göttritz, Prussia. Manufacture of milk or alabaster glass .....	Nov. 26, 1878	884	14	809	
206, 882	Kendall, Amos M., Davenport, Iowa. Machine for making wooden pins .....	Aug. 13, 1878	246	78	14	241
206, 024	Kendall, Marcus M., assignor of one-fourth interest to Emanuel R. Hawn, Leavenworth, Ind. Liquid-measure .....	July 16, 1878	625	181	14	97
199, 650	Kendall, Orson B., Buffalo, N. Y. Boiler-flue cleaner .....	Jan. 29, 1878	997	290	13	187
209, 896	Kendall, Stephen, Jackson, Cal., assignor of one-half interest to John A. Eagon and T. J. Phelps. Ore-stamp .....	Nov. 12, 1878	390	116	14	737
210, 940	Kendall, Stephen Jackson, Cal. Ore-stamp .....	Dec. 17, 1878	626	174	14	922
198, 986	Kendrick, Andrew W., and Charles T., Brooklyn, N. Y. Grain-separator .....	Jan. 8, 1878	275	79, 80	13	58
	Kendrick, Charles T. (See Kendrick, Andrew W. and Charles T.)					
208, 182	Kendrick, Dyer T., Boston, Mass. Combined calendar-dial and watch-crystal .....	Sept. 17, 1878	653	192	14	441
	Kendrick, H. H. (See Cushing, Elbridge G., assignor.)					
202, 731	Kendrick, Hiland H., Oswego, assignor to Munson Brothers, Utica, N. Y. Balancing millstones .....	Apr. 23, 1878	954	274	13	743
209, 273	Kendrick, Isaac, Philadelphia, Pa. Apparatus for promoting combustion in furnaces. Kendrick Loom Harness Company. (See Crowell, John H., assignor.)	Oct. 22, 1878	904	263	14	626
204, 232	Kendrick, Tunis T., Washington, D. C. Invalid attachment for bedsteads .....	May 28, 1878	1098	313	13	982
203, 346	Kenerson, Virgil D. P., and Charles Henry Morgan, Worcester, Mass. Wire-drawing .....	May 7, 1878	114	13	835	
205, 488	Kenerson, Virgil D. P., Worcester, Mass. Wire-drawing pinchers .....	July 2, 1878	25	8	14	12
204, 339	Kenion, Peter Sophocles, Washington, D. C. Furnace-door .....	May 28, 1878	1205	344	13	996
	Kennedy, Benjamin F. (See Roney, Alexander B., assignor.)					
200, 730	Kennedy, Donald Alexander, Eau Claire, Wis. Plow-elevis .....	Feb. 26, 1878	883	259	13	391
	Kennedy, Edward S. T. (See Wilkinson, Asa W., assignor.)					
205, 871	Kennedy, Jesse T., Rockville, Mo. Bed-bottom .....	July 9, 1878	454	129	14	70
206, 247	Kennedy, Lewis B., Waxahatchie, Tex. Brick-machine .....	July 23, 1878	890	254	14	133
204, 961	Kennedy, Michael, assignor, by mesne assignment, to Horace H. Waters, Chicago, Ill. Apparatus for painting wire-cloth .....	June 18, 1878	605	177	13	1099
210, 250	Kennedy, Michael, Chicago, Ill. Paper-hoop sieve .....	Nov. 26, 1878	805	239	14	800
	Kennedy, Thomas. (See Van Benthuyssen, Isaac E., assignor.)					
206, 248	Kennevan, John J., Boston, Mass. Automatic pressure-regulator .....	July 23, 1878	891	254	14	134
205, 397	Kenney, Lester B., Charlotte, Mich. Pole for agricultural implements .....	June 25, 1878	1049	311	13	1162

*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
202, 830	Kennish, William. ( <i>See Barrows &amp; Kennish.</i> )					
204, 831	Kennish, William, Philadelphia, Pa. Insect-powder gun	Apr. 23, 1878	1067	305	13	758
204, 475	Kennon, Beverly, Washington, D. C. Counterpoise battery	June 11, 1878	427	{ 128 127 }	{ 13 13 }	1073
204, 475	Kenny, Nicholas, assignor of one-half interest to Asher N. and Jacob N. Luchs, New York, N. Y. Lessening noise on railways	Oct. 1, 1878	22	6	14	492
208, 474	Kenny, Nicholas, New York, N. Y. Hot-water urn	Oct. 1, 1878	21	6	14	491
203, 547	Kent, Artemas A., Denver, Colo. Ore-washer	May 14, 1878	346	99	13	876
199, 372	Kent, Robert, Brooklyn, N. Y. Warehouse-truck	Jan. 22, 1878	685	201	13	130
203, 465	Kenworthy, Thomas C., and Archibald McGregor, assignors of part interest to John F. Baker and George W. Clark, New York, N. Y. Plate-printing machine	May 7, 1878	241	69, 70	13	853
200, 200	Kenyon, George, Springfield, Ill. Fire-escape	Feb. 12, 1878	318	95	13	290
200, 345	Kenyon, James P., Brooklyn, N. Y. Water-closet valve	Oct. 29, 1878	988	287	14	641
199, 914	Kepner, Solomon, Pottstown, Pa. Hub-attaching device	Feb. 5, 1878	29	9	13	237
	Kerbaugh, Daniel. ( <i>See Field &amp; Kerbaugh.</i> )					
	Kern, Edward, <i>et al.</i> ( <i>See Sherck, Isaac, assignor.</i> )					
	Kern, Isaac, <i>et al.</i> ( <i>See Sherck, Isaac, assignor.</i> )					
	Kern, William H., <i>et al.</i> ( <i>See Sherck, Isaac, assignor.</i> )					
203, 347	Kernochan, Francis Edward, Pittsfield, Mass. Valve attachment for the pipes of wash-basins, &c	May 7, 1878	115	33	13	836
	Kernohan, W. S., <i>et al.</i> ( <i>See McAulis, James D., assignor.</i> )					
210, 332	Kerr, Christopher C., assignor to self, J. Echelberry, J. N. Miller, J. W. McCulloh, M. Echelberry, and R. S. Waddell, Springfield, Mo. Hand-car	Nov. 26, 1878	885	260	14	809
210, 539	Kerr, James, Pittsburg, Pa. Fire-escape	Dec. 3, 1878	102	43	14	844
202, 949	Kerr, John Nevin, West Greenwood, Pa. Fence	Apr. 30, 1878	1199	346	13	778
201, 949	Kerr, Thomas, Milwaukee, Wis. Man-hole and cover	Mar. 19, 1878	561	172	13	511
	Kerr, Thomas B. ( <i>See Rogers, Charles, assignor.</i> )					
208, 320	Kerriek & Vinegardner, ( <i>See Tenant, Hanson P., assignor.</i> )					
207, 425	Kerschner, Daniel, Thomas S. and Francis M. Monger, Connorsville, Ind. Plow	Sept. 24, 1878	812	237	14	464
	Kersey, John Holland, assignor to self and A. W. Hefton, Columbus Junction, Iowa. Mechanical movement	Aug. 27, 1878	822	243	14	322
202, 549	Kershaw, Thomas, Philadelphia, Pa. Spooling-machine	Apr. 16, 1878	751	217	13	711
202, 550	Same. Stop-motion for doubling and twisting machines	Apr. 16, 1878	753	217	13	711
204, 899	Kershaw, William H., Widnes, England. Roof-covering and sheathing	June 18, 1878	523	153	13	1088
208, 608	Kerslner, Stephen W., Indianapolis, Ind. Link for chain-pumps	Oct. 1, 1878	153	45	14	509
208, 609	Same. Metallic bucket for chain-pumps, &c	Oct. 1, 1878	153	45	14	509
	Kesler, William H. H. ( <i>See Clarkson &amp; Kesler.</i> )					
200, 201	Kesselring, Jacob, Blissfield, Mich. Gate	Feb. 12, 1878	318	95	13	290
209, 406	Kessler, Peter, assignor of one-half interest to Thomas W. Davis, Butler, Md. Plow-point	Oct. 29, 1878	1047	305	14	650
	Kester, John H. ( <i>See Tise &amp; Kester.</i> )					
207, 606	Ketcham, George W., Newark, N. J. Sheet-metal pipe	Sept. 3, 1878	22	8	14	352
200, 920	Ketcham, James L., Milwaukee, Wis. Reversible dumping-boat	Mar. 5, 1878	100	34	13	430
208, 101	Kethledge, Seth, Centre Point, Iowa. Lumber-measure	Sept. 17, 1878	559	167	14	429
202, 270	Ketzcher, John, Little Rock, Ark. Bath	Apr. 9, 1878	436	127	13	664
199, 448	Keyes, Walter H., East Princeton, Mass. Pencil-sharpener	Jan. 22, 1878	756	222	13	142
209, 172	Keys, Ezra C., Allegheny, Pa. Harvester cutter-bar	Oct. 22, 1878	808	234	14	712
203, 548	Keyt, Alonzo T., Cincinnati, Ohio. Sphygmometer	May 14, 1878	347	{ 99 100 }	{ 13 13 }	876
199, 981	Kibbe, Augustus F., Brooklyn, N. Y. Oil-stove	Feb. 5, 1878	89	29, 30	13	247
210, 333	Kibler, Nathan, Pittsfield, Ill. Grain-separator	Nov. 26, 1878	886	{ 260 261 }	{ 14 13 }	810
204, 053	Kidder, David S., Turner's Falls, Mass. Fly-trap	May 21, 1878	883	253	13	951
203, 051	Kidder, George R., assignor to self and Nathan Hurd, Armada, Mich. Sliding door	Apr. 30, 1878	1295	376	13	791
209, 407	Kidder, Moses W., Boston, assignor to Person Noyes, Lowell, Mass. Gas-pressure regulator	Oct. 29, 1878	1048	305	14	650
201, 113	Kidder, Richard B., Columbus, Wis. Rotary engine	Mar. 12, 1878	300	91	13	467
204, 900	Kidder, Wellington P., Jamaica Plain, Mass. Inking apparatus for printing-presses	June 18, 1878	524	153	13	1088
	Kiddoo, J. B., <i>et al.</i> ( <i>See Leland, Edwin A., assignor.</i> )					
	Kidwell, John L. ( <i>See Maloney &amp; Shoemaker, assignors.</i> )					
200, 173	Kidwell, John L., and James A. Maloney, Georgetown, D. C., assignors to selves and David L. Shoemaker. Machine for cleaning grain	Oct. 22, 1878	808	234	14	613
105, 191	Kieffer, Joseph, Montreal, Quebec, Canada. Machinery for molding counters or stiffeners for boots and shoes	June 25, 1878	830	{ 246 247 }	{ 13 13 }	1134
	Kiengle, Jacob. ( <i>See Steinmann, Charles, assignor.</i> )					
	Kiggins, J. T. ( <i>See Rand, Charles N., assignor.</i> )					
206, 579	Kilborn, Alden D., Oakland, Cal. Oil-cup	July 30, 1878	1281	368	14	186
208, 245	Same. Same	Sept. 24, 1878	732	214	14	454
199, 373	Kilburn, Cheney, assignor to the Hale & Kilburn Manufacturing Company, Philadelphia, Pa. Furniture structure	Jan. 22, 1878	686	201	13	131
203, 739	Same. Spring for seats	May 14, 1878	539	153	13	900
	Kilburn, Ira C., <i>et al.</i> ( <i>See Taylor, Lewis P., assignor.</i> )					
206, 459	Kilburn, Thaddeus Onias, Washington, Minn. Bolting-reel	July 30, 1878	1154	331	14	171
202, 950	Kile, Jarvis C., Woodbourne, assignor of one-half interest to Isaac Jelliff, Liberty, N. Y. Apparatus for raising water	Apr. 30, 1878	1200	347	13	779
207, 662	Kilgore, William M., Uniontown, Ohio. Steam-boiler	Sept. 3, 1878	80	24	14	359
206, 798	Killian, Dallas M., and Le Roy Humbert, Sioux City, Iowa. Combined cradle and table	Aug. 6, 1878	146	45	14	225
206, 799	Killian, Isaac, Washington, Ind. Hay-drag	Aug. 6, 1878	147	46	14	225
207, 286	Killin, John M., assignor to Frank S. Bissell, Pittsburg, Pa. Broiler attachment for stoves	Aug. 20, 1878	666	197	14	297
	Kilmer, Augustus. ( <i>See Kilmer, Irving A., assignor.</i> )					
201, 010	Kilmer, Irving A., assignor of one-half interest to Augustus Kilmer, Howe's Cave, N. Y. Bale-tie	Mar. 5, 1878	198	63	13	445
201, 684	Kimball, Alonzo, New York, N. Y. Machine for making wired tickets	Mar. 26, 1878	907	{ 277 278 }	{ 13 13 }	564
198, 747	Kimball, Charles M., Bradford, Mass. Car-axle coupling	Jan. 1, 1878	18	4	13	11
200, 731	Same. Apparatus for the manufacture of manure from night-soil	Feb. 26, 1878	884	260	13	391
203, 163	Same. Railway-car truck	Apr. 30, 1878	1413	412	13	807
	Kimball, Charles O. ( <i>See Drake, John C., assignor.</i> )					
209, 951	Kimball, Edward, Chicago, Ill. School-desk	Nov. 12, 1878	449	136	14	745
204, 403	Kimball, Ephraim Milton, assignor to self and Oran F. Foster, Toledo, Ohio. Appliance for flat filing	June 4, 1878	70	24	13	1022
	Kimball, Frederick J., <i>et al.</i> ( <i>See Caum, Edward L., assignor.</i> ) (Reissue.)					

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
207, 874	Kimball, John, Boston, Mass. Anti-attrition compound .....	Sept. 10, 1878	314	.....	14	392
205, 652	Kimball, Joseph E., Abington, assignor to Henry S. Jenkins, trustee, Boston, Mass. Nailing-machine for boots and shoes .....	July 2, 1878	197	50	14	34
	Kimball, Lewis, jr. (See Brown & Kimball.)					
	Kimball, Samuel. (See Simpson & Kimball.)					
206, 800	Kimball, Samuel P., Union County, Ohio. Corn-row marker .....	Aug. 6, 1878	148	46	14	225
203, 348	Kimball, Volney P., Watertown, N. Y. Grain-cutting machine .....	May 7, 1878	115	33, 34	13	836
	Kimball, W. H. (See Allen, Horatio N., assignor.)					
200, 650	Kimbark, Seneca D., et al. (See Parmenter, Orville L., assignor.)					
208, 400	Kimberly, Amos E., West Liberty P. O., Iowa. Bale-tie .....	Feb. 26, 1878	810	238	13	381
	Kimberly, Amos E., assignor of two-thirds interest to Gustave Burkart and Z. N. King, West Liberty, Iowa. Thill-coupling .....	Sept. 24, 1878	891	260	14	474
206, 336	Kime, Warren W. S., Victor, Iowa. Seed-dropper .....	July 23, 1878	1002	285	14	148
206, 951	Kineaid, Barron Potter, Bridgeton, N. Y. Plier for wiring bottles .....	Aug. 13, 1878	314	96	14	249
206, 578	Kinder, Harvey H., West Brownsville, Pa. Washing-machine .....	July 30, 1878	1280	367	14	186
200, 732	Kinehan, James, Springfield, Ill. Gage for adjusting the hair-springs of watch-balances .....	Feb. 26, 1878	885	260	13	392
210, 784	King, Arthur R., and James Dougherty, Brooklyn, N. Y. Machine for forming screw-threads in sheet metal .....	Dec. 10, 1878	432	120	14	889
201, 618	King, Charles A., Meriden, Conn. Attaching fore ends of gun-stocks .....	Mar. 26, 1878	851	258	13	555
	King, Daniel S. (See Brown, Alvin M., assignor.)					
204, 233	King, David H., New York, N. Y. Newspaper-file .....	May 28, 1878	1099	314	13	982
	King, Edward J. (See Brand & King.)					
210, 459	King, Elisha. (See Chapman & King.)					
	King, Francis, Baltimore, Md., assignor of one-half interest to John L. Sinn, Washington, D. C. Pipe-couplings for cars .....	Dec. 3, 1878	73	18	14	834
205, 489	King, George D., assignor to Marshall C. Thompson, Oswego, N. Y. Machine for stretching cloth .....	July 2, 1878	26	8, 9	14	12
8, 055	King, George E., assignor to Frederick H. Kursheedt, New York, N. Y. Fluting-machine (Reissue) .....	Jan. 22, 1878	946	275	13	172
	King, George Samuel. (See Laraway & King.)					
200, 617	King, Herbert M., and S. Dermott Pierce, Chicago, Ill. Combination-padlock .....	Feb. 26, 1878	763	224	13	374
198, 769	King, Hiram T., Rochester, N. Y. Culinary steamer .....	Jan. 1, 1878	49	13	13	15
200, 733	King, Horace W., Alden, N. Y. Machine for trussing barrels .....	Feb. 26, 1878	887	261	13	392
	King, Irving D. (See Kirk, David, assignor.)					
207, 528	King, Jacob H., New Paris, Ohio. Animal-trap .....	Aug. 27, 1878	934	275	14	335
201, 925	King, James F., Edwardsville, Kans. Spring-seat for wagons .....	Apr. 2, 1878	66	18	13	608
	King, John. (See Wallace & King.)					
200, 545	King, John, assignor of one-half interest to Wallace & Sons, Ansonia, Conn. Electric lighting apparatus .....	Feb. 19, 1878	672	198	13	352
198, 848	King, John G., assignor of one-half interest to L. M. Jackson and Anthony O. Stiveson, Apollo, Pa. Combined fire-escape and spring bed-bottom .....	Jan. 1, 1878	126	36	13	28
203, 624	King, Josias R., Saint Paul, Minn. Trundling toy .....	May 14, 1878	417	119	13	885
207, 186	King, Leicester Purington, and Arthur Melville White, Cincinnati, Ohio. Motor .....	Aug. 20, 1878	561	168, 169	14	283
200, 312	King, Phineas F., assignor to G. N. and E. J. Beard, Saint Louis, Mo. Time-lock for safes, &c. ....	Feb. 12, 1878	420	128, 129	13	307
201, 535	King, Phineas F., assignor to Beard & Brother, Saint Louis, Mo. Time-lock .....	Mar. 19, 1878	747	228	13	537
204, 155	King, Rufus J., Dayton, Ohio. Fire-pot lining for cook-stoves .....	May 28, 1878	1015	288	13	971
206, 180	Same. Oven-door .....	July 23, 1878	815	233	14	124
210, 785	King, Sidney D., West Pittston, Pa. Vehicle-spring .....	Dec. 10, 1878	434	121	14	889
205, 800	King, Summitt Reuben, Mason, Mich. Stock-pump .....	July 9, 1878	380	109	14	60
207, 748	King, Summitt R., Mason, Mich. Machine for erecting frame structures .....	Sept. 3, 1878	164	50	14	370
207, 529	King, Theodore F., Geneva, N. Y. Coal and ash sifter .....	Aug. 27, 1878	936	275	14	335
202, 034	King, Thomas Henry, San Francisco, Cal. Anti-friction bearing for journals and axles .....	Apr. 2, 1878	172	50	13	624
202, 271	Same. Vehicle-wheel .....	Apr. 9, 1878	437	127	13	664
	King, Thomas M. (See Lewis & Maloney, assignors.)					
199, 555	King, Thomas P. (See Van Noubuys & King.)					
209, 897	King, Walter A., Dayton, Ohio. Shelf for cooking-stove .....	Jan. 22, 1878	869	254	13	160
	King, W. Haskell, Athol, Mass. Lathe-chuck .....	Nov. 12, 1878	391	117	14	737
	King, William. (See Gates, Chealey, assignor.)					
201, 252	King, William, Philadelphia, Pa. Ornamenting wood .....	Mar. 12, 1878	438	135	13	487
204, 439	King, William, assignor to Henry Hall, London, England. Chisel .....	June 4, 1878	26	9	13	1016
	King, William Henry. (See Boyer & King.)					
199, 449	King, Z. N., et al. (See Kimberly, Amos E., assignor.)					
	Kingsbury, Andrew B., Utica, assignor of two-thirds interest to Warren and Hiram H. Ranney, Mohawk, N. Y. Ash-sifter .....	Jan. 22, 1878	757	222	13	142
207, 969	Kingsbury, Hiram H., Olney, Ill. Express-box .....	Sept. 10, 1878	414	125	14	405
207, 875	Kingsbury, John, Greenville, Ala. Brick-kiln .....	Sept. 10, 1878	314	95	14	392
204, 494	Kingsbury, John J. D., East Bloomfield, N. Y. Thill-coupling .....	June 4, 1878	71	24	13	1022
202, 272	Kingsced, Christian, Sidney, Ohio. Awning-frame .....	Apr. 9, 1878	439	128	13	665
202, 832	Kingsford, Thomson, Oswego, N. Y. Process and apparatus for drying starch .....	Apr. 23, 1878	1068	306	13	758
202, 951	Kingsland, George, Kingsland, N. J. Strawberry-vine cutter .....	Apr. 30, 1878	1201	347	13	779
202, 831	Kingsland, Hugh A., Newark, N. J. Implement for capping and uncapping cartridges .....	Apr. 23, 1878	1067	305	13	758
205, 398	Kingley, Horace L., Racine, Wis. Platform-gear for wagons .....	June 25, 1878	1049	311	13	1162
202, 773	Kingley, Maning L., Kendall Creek, Pa. Sash-fastener .....	Apr. 9, 1878	440	128	13	665
203, 840	Kingston, John C., Buffalo, N. Y. Machine for trimming last-blocks .....	May 21, 1878	856	187	13	922
205, 102	Kinnaird, Alexander, Baltimore, Md. Corpse-cooler .....	June 18, 1878	722	215	13	1115
205, 625	Klune, Reuben Oliver, El Dorado, Ill. Grain-binder .....	May 14, 1878	417	119	13	885
200, 202	Kinney, Francis S., New York, N. Y. Plug-tobacco .....	Feb. 12, 1878	819	95	13	281
203, 164	Same. Cigarette-package .....	Apr. 30, 1878	1414	412	13	807
204, 901	Same. Testing machine .....	June 18, 1878	525	153	13	1088
204, 982	Kinney, Henry Woods, Saint Johnsbury, Vt. Extension-table .....	June 18, 1878	606	178	13	1090
202, 658	Kinney, Horace B., Columbus, Ohio. Machine for making pitchforks .....	Apr. 23, 1878	883	253	13	735
199, 651	Kinney, Jesse, London, Canada. Iron fence .....	Jan. 29, 1878	998	290	13	187
210, 127	Kinney, Simon, Bay City, Mich., assignor of one-half interest to Chauncy Spearin, Chicago, Ill. Saw-swing .....	Nov. 19, 1878	652	193	14	775
199, 073	Kinney, William, Bellevue, Ohio. Clevis .....	Jan. 8, 1878	359	106	13	72
207, 124	Kinsey, Ernest U., Passaic, assignor to self and Preston Little, Trenton, N. J. Puzzle-block .....	Aug. 20, 1878	500	150	14	276
	Kinsey, Gottlieb. (See Schweitzer & Kinsey.)					
203, 278	Kinsey, Samuel A., assignor to David C. Proctor and Richard A. Culter, Peoria, Ill. Stove-hearth .....	May 7, 1878	42	13	13	826
	Kinsley, Myron H. (See Bassett, Marshall L., assignor.)					

*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr.E.	Vol.	Page.
210, 334	Kinsaman, John H., Salem, Mass. Bath-tub, basin, sink, water-closet, &c.	Nov. 26, 1878	887	261	14	810
210, 540	Same. Indicator-lock	Dec. 3, 1878	163	43	14	844
202, 551	Kinter, William H., and Benjamin F. Williams, Cookport, Pa. Carriage wheel and axle	Apr. 16, 1878	754	218	13	711
200, 313	Kirby, George W., <i>et al.</i> (See Wroth, Lafayette, assignor.)					
203, 463	Kirby, James A., assignor of two-thirds interest to D. J. Avery and Joseph W. Taft, Chicago, Ill. Car-brake	Feb. 12, 1878	433	129	13	308
205, 672	Kirby, James A., assignor of two-thirds interest to William B. Keep, Chicago, Ill. Street-railway track	May 7, 1878	240	60	13	853
210, 860	Kirby, James A., assignor of two-thirds interest to Daniel J. Avery and Joseph W. Taft, Chicago, Ill. Vehicle-brake	July 9, 1878	455	129	14	70
204, 580	Kirby, James A., assignor to William B. Keep, Chicago, Ill. Railway-switch bar	Dec. 17, 1878	521	147	14	909
203, 740	Kirby, John, jr., assignor to Post & Co., Cincinnati, Ohio. Locomotive head-light	June 4, 1878	149	50	13	1034
203, 922	Kirby, Josiah, Cincinnati, Ohio. Bung	May 14, 1878	540	153	13	900
205, 673	Same. Bung-stave lock	May 21, 1878	743	214	13	934
205, 673	Same. Bung-lock	July 9, 1878	456	130	14	70
206, 116	Kirby, William A. (See Kellogg, Daniel W., assignor.)	July 16, 1878	727	209	14	109
209, 898	Kirby, William M., Pittsburg, Pa. Smoke-consuming device for furnaces	Nov. 12, 1878	892	117	14	737
205, 277	Kirch, J. B. (See Morrison, Robert H. D., assignor.)					
190, 211	Kirchner, Gustave A., assignor to Julia A. Heacock, Philadelphia, Pa. Burial-casket	June 25, 1878	916	272	13	1145
200, 795	Kirk, Abner Gilbert, New Brighton, Pa. Portable fence	Jan. 15, 1878	516	151	13	96
204, 234	Kirk, David, assignor to W. A. Lamb, Orleans, N. Y. Clip for vehicles	Feb. 28, 1878	943	278	13	401
201, 536	Kirk, David, assignor to self and Irving D. King, Orleans, N. Y. Vehicle-seat lock	May 28, 1878	1000	814	13	982
208, 401	Kirk, Edward C., Philadelphia, Pa. Bronze alloy	Mar. 19, 1878	749		13	537
208, 826	Kirk, Henry, assignor to self and Campbell, Jones & Co., Pittsburg, Pa. Glass-melting furnace	Sept. 24, 1878	892	260	14	474
208, 826	Kirk, James. (See Swindells, James, assignor.)					
208, 742	Kirk, Joseph S., assignor to self and Gustavus Ricker, New York, N. Y. Machine for making bay-meal	Oct. 8, 1878	897	113	14	549
201, 253	Kirkbride, David M., and Michael Neil, Dayton, Ohio. Flashed fence	Oct. 8, 1878	807	88	14	537
205, 276	Kirkham, Henry P., New York, N. Y. Horse-stall for vessels	Mar. 12, 1878	439	135	13	487
199, 450	Kirkham, Richard N. B., Kansas, Ill. Horse-bay-fork	June 25, 1878	916	271	13	1145
206, 736	Kirkham, Thomas N., Westminster, David Hulett, High Holborn, and Samuel, jr., and Josiah Chandler, 104 Newington Causeway, England. Gas-purifying apparatus	Jan. 22, 1878	757	222	13	142
201, 685	Kirkham, Thomas N., Westminster, David Hulett, London, Samuel, sr., and Samuel Chandler, jr., Southwark, England. Apparatus for condensing, washing, and purifying gas and other vapors	Aug. 6, 1878	80	25	14	217
203, 165	Kirkland, John, Menomonee, Wis. Spark-arrester	Mar. 26, 1878	911	278	13	565
205, 550	Kirkland, Martin P. (See Shutt, Michael, assignor.)					
205, 874	Kirkpatrick, Edward C., Camden, N. J. Trundle-toy	Apr. 30, 1878	1415	412	13	807
207, 530	Kirkpatrick, Robert, Richmond, New Brunswick, Canada. Weighing device	July 2, 1878	102	29	14	22
202, 175	Kirkpatrick, Smiley, Waterman, Ill. Sulky-plow	July 9, 1878	457	180	14	70
205, 875	Kirksey, James K., Pickens County, S. C. Adjustable plow-stock	Aug. 27, 1878	937	275	14	336
205, 875	Kirtland, Charles A., New York, N. Y. Plate-glass face-protector	Apr. 9, 1878	343	100	13	651
201, 795	Kisor, John, Nevada, Ohio. Machine for making wooden barrels	July 9, 1878	458	130	14	70
204, 340	Kiss, Emerick, New York, N. Y. Table-bedstead (Reissue)	Aug. 13, 1878	469	141	14	268
206, 460	Same. Wardrobe-bedstead	Mar. 26, 1878	1022	312	13	581
205, 560	Kissell, Aaron, Findlay, Ohio. Reciprocating steam-engine	May 28, 1878	1207	344	13	996
205, 560	Kister, Thomas J. (See Kurtz & Kister.)	July 30, 1878	1155	331	14	171
205, 561	Kistler, Willoughby F., Cincinnati, Ohio. Flour sifter, scoop, and strainer	July 2, 1878	103	30	14	22
201, 424	Kistner, Harry U. (See Baum, Jacob Monroe, assignor.)					
203, 340	Kistner, Harry Ush, and Edwin Maximus Hummel, Selin's Grove, Pa. Skate-sharpener	July 2, 1878	104	30	14	22
206, 883	Kitchen & Co., George H. (See Scattergood, John R., assignor.) (Reissue)					
206, 676	Kitson, Richard, Lowell, Mass. Cotton opener and cleaner	Mar. 19, 1878	635	194	13	521
206, 240	Kittleston, Ole O., Milan, Ill. Barbed fence-wire	May 7, 1878	117	34	13	836
199, 809	Kittson, Alfred Briggs, Johnston, N. Y. Glove-fastening	Aug. 13, 1878	247	78	14	241
8, 034	Klapp, William J., Osage Mission, Kans. Medical compound	Aug. 6, 1878	20		14	209
206, 665	Klaucke, Julius, Solingen, Germany. Shoe-horn	July 23, 1878	892	254	14	184
206, 665	Klauser, William, <i>et al.</i> (See Butcher, Joseph, assignor.)					
206, 665	Kleckner, Asaph M., Kendall Creek, Pa. Polish-rod adjuster for oil-wells	Jan. 29, 1878	1146	337	13	211
206, 665	Klee, John, Dayton, Ohio, assignor to R. C. Anthony, New York, N. Y. Bottle-stopper. (Reissue)	Jan. 8, 1878	438	128	12	84
206, 665	Klee, Philip. (See Groth, Henry, assignor.)					
206, 665	Klein, Peter Ludwig, Werden on the Ruhr, Prussia, Germany. Wool-carding machine (Reissue)	Apr. 2, 1878	239	70	13	633
206, 665	Klinch, U. <i>et al.</i> (See Kast, Gustavus, assignor.)					
206, 665	Kline, John, Dayton, Ohio. Constructing osage-orange hedges	Aug. 13, 1878	399	124	14	250
206, 665	Kline, Marx. (See Purdy, Charles G., assignor.)					
206, 665	Klingaman, John G. (See Price & Klingaman.)					
206, 665	Klingler, Simon. (See Wekerle, August, assignor.)					
206, 665	Klingspor, Friedrich, jr., Siegen, Westphalia, Germany. Inkstand	May 21, 1878	884	254	13	951
206, 665	Klinzing, John, Pittsburg, Pa. Lock	May 21, 1878	885	254	13	951
206, 665	Klobass, Victor. (See Kloczewski & Klobass.)					
206, 665	Klock, Amos K., Freeport, Ill. Feather-renovator	Mar. 26, 1878	911	278	13	565
206, 665	Kloczewski, Adrian M., and Victor Klobass, Washington, D. C. Flask for cooling liquids	Feb. 5, 1878	174	56	13	280
206, 665	Klotz, August, Vallejo, Cal. Windmill-wheel	Feb. 5, 1878	175	56	13	280
206, 665	Klotz, Gottfried, Balmisch-Kamnitz, Austria. Skuto	Jan. 29, 1878	1060	310	18	197
206, 665	Kluber, Joseph. (See Otten & Kluber.)					
206, 665	Kluenter, John, Allentown, Pa. Window-screen	July 23, 1878	816	233	14	124
206, 665	Knapp, Albert M., Providence, R. I. Toy	Sept. 17, 1878	561	168	14	429
206, 665	Knapp, Edgar, Stanfordsville, N. Y. Horse-bay-rake	Apr. 23, 1878	1069	306	13	758
206, 665	Knapp, Friedrich, Brunswick, Germany. Tramping-drum for use in the manufacture of leather	June 25, 1878	1050	311	13	1162
206, 665	Knapp, George W., assignor to self, John C. Matthal, and James E. Ingram, Baltimore, Md. Securing handles to tin cups	July 2, 1878	199	60	14	34
206, 665	Knapp, Henry F., New York, N. Y. Removing bars of rivers (Reissue)	Apr. 30, 1878	1488	435	13	816
206, 665	Same. Railway air-brake	June 4, 1878	26	9	13	1016
206, 665	Knapp, James W. (See Knapp, John G. and James W.)					
206, 665	Knapp, John G. and James W., assignors of one-third interest to James H. Holly, Warwick, N. Y. Cabinet-bedstead	Feb. 19, 1878	532	157	13	331
206, 665	Knappen, Loyal E., <i>et al.</i> (See Richey, Gaspar T., assignor.)					
206, 665	Knauer, Christian Friedrich, Urach, Wurtemberg, Germany. Nail-extractor	Nov. 19, 1878	560	168	14	763



## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
208, 402	Kuerr, Lewis, jr. ( <i>See</i> Whealen & Knerr.) Knickerbocker, Mills, New Lenox, Ill. Wire-barbing tool	Sept. 24, 1878	893	261	14	475
206, 580	Knickerbocker, Z. Smith, <i>et al.</i> ( <i>See</i> Pate, Theodore H., assignor.) Knickmann, Henry, East New York, N. Y. Tool for removing pintles from hinge-joints	July 30, 1878 Sept. 10, 1878	1282 315	368 95	14 14	186 302
207, 876	Kniffin, Willis, Yorktown, N. Y. Lifting-jack	Jan. 22, 1878	870	254	13	160
199, 556	Knight, Aaron R. W., Philadelphia, Pa. Ladder	Jan. 29, 1878	1061	310	13	197
199, 721	Knight, Edward D. ( <i>See</i> Byrne & Knight.) Knight, J. Lee, Topeka, Kans. Device for calculating percentage, &c.	Jan. 15, 1878	405	137	13	88
199, 159	Knight, Jehial D., West Concord, N. H. Grain-measure	Mar. 5, 1878	198	63	13	445
201, 020	Knight, John L. ( <i>See</i> Roberts & Knight.) Knight, John L., New York, N. Y. Sewer-trap	Apr. 2, 1878	87	18	13	608
201, 927	Same. Rudder	June 11, 1878	255	80	13	1052
204, 672	Same. Lubricator Knight, John S. ( <i>See</i> Rowe & Knight.) Knight, Luther, Arlington, Vt., assignor of one-half interest to William C. Allen, Cambridge, N. Y. Steam-boiler	Nov. 12, 1878	393	117	14	737
209, 899	Knight, Lyman W., Elgin, Ill. Sash-fastener	June 25, 1878	917	272	13	1146
205, 278	Knight, Samuel, assignor to Henry K. White, Saint Louis, Mo. Clothes-pounder	Apr. 2, 1878	66	18	13	608
201, 926	Knight, Thomas G., Brooklyn, N. Y. Stench-trap	Apr. 9, 1878	343	100	13	652
202, 176	Same. Urinal-safe for water-closets	Dec. 10, 1878	435	121	14	889
210, 786	Knight, Thomas H., Orville H. Curtis, and George C. Gibbs, Milwaukee, Wis.; said Knight assignor to said Curtis. Fire-escape	June 4, 1878	152	50	13	1034
204, 581	Knight, William H. ( <i>See</i> Bisset, George, jr., assignor.) Knipe, Edward P. ( <i>See</i> Abbott, William W., assignor.) Same. ( <i>See</i> Gates, Seldon T., assignor.)	Apr. 16, 1878 Oct. 15, 1878	755 668	218 192	13 14	711 589
202, 552	Kniphecher, John, Wima, Tex. Bale-tie	Feb. 26, 1878	889	261	13	392
209, 057	Same. Windlass water-elevator	Mar. 5, 1878	101	34	13	430
200, 734	Knoblock, John C., and Thelus M. Bissell, assignors to Saint Joseph Reaper and Machine Company, South Bend, Ind. Plow	Aug. 27, 1878	938	276	14	336
200, 921	Knoch, Charles F. ( <i>See</i> Salomon, Knoch & Semel.) Knoppel, John C., New York, N. Y. Shutter-fastening	Apr. 16, 1878	756	218	13	711
207, 531	Knopf, Herman, Brooklyn, N. Y. Suspender	Jan. 8, 1878	360	106	13	73
202, 553	Knoppenberger, James. ( <i>See</i> McDougall, William James, assignor.) Knoth, George, Breslau, N. Y. Fodder-cutter	June 16, 1878 June 25, 1878	723 1051	215 311	13 13	1115 1102
199, 074	Knotts, Jedediah, <i>et al.</i> ( <i>See</i> Austin, Dinamore, assignor.) Knouse, John, Harrisburg, Pa. Pump-plunger	Nov. 20, 1878	890	261	14	810
205, 103	Knowles, Charles M., New London, Conn. Wire-cutting tool	Nov. 5, 1878	171	51	14	704
205, 400	Same. Bit-stock	Jan. 22, 1878	758	223	13	142
210, 335	Same. Bit-stock	Dec. 17, 1878	522	148	14	909
209, 684	Knowles, John Henry, Philadelphia, Pa. Stop-motion for spinning or twisting machine. Knowlton, Charles H. ( <i>See</i> Furubush & Knowlton.) Knowlton, Henry, assignor to self and Lorenzo D. Cook, Flint, Mich. Door stop and holder	Dec. 10, 1878 Apr. 9, 1878 Feb. 12, 1878	1051 341 420	311 128 96	13 13 13	1102 665 291
199, 451	Knowlton, William A. ( <i>See</i> Spaulding, George H., assignor.) Knowlton, William A., and Andrew Rutledge, Rockford, Ill. Cultivator	July 16, 1878 Jan. 1, 1878	626 170	181 48	14 13	97 35
210, 861	Knox, Albert, Oaccola, Iowa. Feed-cooking apparatus	June 11, 1878	257	80	13	1052
210, 614	Knox, Richard F., San Francisco, Cal. Quicksilver-furnace	Oct. 1, 1878	154	45	14	510
202, 274	Knox, Robert Grigg, Sidney, Ohio. Handle-extension attachment for brooms	Sept. 17, 1878	479	144	14	418
206, 025	Knox, Salathiel H. ( <i>See</i> Thomas & Knox.) Knox, Thomas C., New York, N. Y. Aerated-liquor apparatus	Feb. 5, 1878	92	30	13	247
198, 888	Knudsen, Richard, Brooklyn, N. Y. Inclined-plane railway	Feb. 19, 1878	589	173	13	339
204, 673	Koch, Friedrich, assignor of one-half interest to Francis X. Huber, New York, N. Y. Harness-saddle Koch, George. ( <i>See</i> Koch, William and George.) Koch, George, Saint Petersburg, Pa. Casing for oil-wells	Mar. 5, 1878	102	34	13	431
208, 610	Koch, Harry H., and Daniel Lynahan, Buffalo, N. Y. Clasp for exhibiting shoe-laces	Oct. 8, 1878	308	88	14	537
199, 982	Koch, John C., jr., Berlin, Prussia. Album	Oct. 30, 1878	1282	368	14	186
200, 460	Koch, John C., New York, N. Y. Picture-exhibitor	Oct. 1, 1878	155	45	14	510
200, 922	Koch, John Caspar, jr., Berlin, Prussia. Easel-album	Apr. 9, 1878	344	101	13	652
208, 743	Koch, Louis. ( <i>See</i> Bull & Koch.) Koch, Pierre P. E. M., Antwerp, Belgium. Apparatus for preserving food	Sept. 17, 1878	562	168	14	429
206, 581	Koch, William and George, Monroe, Pa. Oil-tank	Sept. 24, 1878	894	261	14	475
206, 611	Koch, William and George, Saint Petersburg, Pa. Windlass for oil-wells	May 21, 1878	744	214	13	934
202, 177	Koehler, Clarkson A. and James A., East Saginaw, Mich. Skid	July 23, 1878	894	255	14	134
208, 103	Koehler, James A. ( <i>See</i> Koehler, Clarkson A. and James A.) Koehler, Louis M., Burlington, Iowa. Ditching-plow	July 23, 1878	893	255	14	134
208, 403	Koeller, Franz, Newlongbach, Austria. Bottle-stopper	Aug. 6, 1878	20	6	14	209
203, 923	Koenig, Joseph, Indianapolis, Ind. Awning	Aug. 6, 1878	22	7	14	209
206, 251	Koepe, Friedrich, Bochum, Prussia. Elevator	Aug. 20, 1878	667	198	14	297
206, 250	Koerber, Alexander R., assignor of one-half interest to James Sheridan, Toronto, Ontario, Canada. Reed-organ	Nov. 26, 1878	891	261	14	810
8, 301	Kohl, Charles R. <i>et al.</i> ( <i>See</i> Upton, William, assignor.) Kohl, John W. <i>et al.</i> ( <i>See</i> Upton, William, assignor.) Kohl, William S. <i>et al.</i> ( <i>See</i> Upton, William, assignor.)	Aug. 6, 1878	20	6	14	209
201, 883	Kohn, Tobias, Hartford, Conn. Device for finishing thread (Reissue)	Aug. 6, 1878	22	7	14	209
206, 182	Kohnig, John, Dayton, Ohio. Baker's oven	Aug. 20, 1878	667	198	14	297
207, 532	Koloseus, Max, New York, N. Y. Electro-magnetic burglar-alarm	Nov. 26, 1878	891	261	14	810
209, 900	Komp, Albert, New York, N. Y. Picture-frame	Oct. 1, 1878	155	45	14	510
210, 541	Same. same	Apr. 9, 1878	344	101	13	652
206, 677	König, Joseph Heinrich, assignor to self, E. Oakes, and Herman Lerner, Mason City, W. Va. Recovering salt from its admixture with impurities in crude brine. Konigsberger & Co. ( <i>See</i> Odhner, Willgodt, assignor.) Kook, William, and Joseph L. Hall, Cincinnati, Ohio; said Kook assignor to said Hall, Time-lock	Dec. 3, 1878	164		14	844
206, 678	Same. Time-lock for safes	Aug. 6, 1878	20	6	14	209
207, 287	Koons, Frank A. B., Shickshinney, Pa. Roller for paper making and other machines	Aug. 6, 1878	22	7	14	209
210, 336	Koontz, James, Basil, Ohio. Lighting and extinguishing device for lamps	Aug. 20, 1878	667	198	14	297
208, 612	Koonze, Mary E., <i>et al.</i> ( <i>See</i> Moore, William D., assignor.) Koopman, William H., Terry Haute, Ind. Counter-support for boots and shoes	Nov. 26, 1878	891	261	14	810
211, 025	Koplin, William, Newcastle, Pa. Nail-plate feeder	Oct. 1, 1878	156	46	14	510
201, 786	Koppenhefer, Cornelius, Halifax, Pa. Plow	Dec. 17, 1878	723	199	14	933
207, 042	Korow, Kellea. ( <i>See</i> Striedinger, Kelly & Korow.) Korsgaard, Mads Peter, Houghton, Mich. Grain-separator	Mar. 26, 1878	1014	310	13	580
		Aug. 13, 1878	400	124	14	259

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	Korameyer, F. A. ( <i>See</i> Mueller & Gross, assignors.)					
207, 877	Kortick, Frank, San Francisco, Cal. Hook	Sept. 10, 1878	316	96	14	392
205, 963	Körting, Ernst, Hannover, Prussia. Locomotive feed-water heater	July 18, 1878	566	163	14	89
200, 834	Koskul, Frederick, Philadelphia, Pa. Manufacture of artificial stone	Mar. 5, 1878	21	21	12	418
200, 835	Same same	Mar. 5, 1878	22	22	13	418
205, 964	Kosiol, Louis. ( <i>See</i> Boger & King, assignors.)					
208, 827	Koss, William, Farmersburg Township, Clayton County, Iowa. Mechanical movement	July 18, 1878	587	162	14	89
	Kottman, Bernard, Cincinnati, Ohio. Catch-basin	Oct. 8, 1878	398	114	14	549
190, 212	Kraber, J. Luther, et al. ( <i>See</i> Becker, Leander, assignor.)					
	Krapp, John, Brooklyn, assignor to M. J. Grossman, New York, N. Y. Rocking-chair	Jan. 15, 1878	518	152	13	98
200, 204	Same Rocking-chair	Feb. 12, 1878	320	96	13	291
205, 876	Kraus, John, assignor of two-thirds interest to John W. Munday and Edward S. Everts, Chicago, Ill. Band-saw	July 9, 1878	480	131	14	71
8, 512	Kraus, Leopold. ( <i>See</i> Bray, Morris P., assignor.)					
	Krausch, Theodore, Chicago, Ill. Refrigerator-building (Reissue)	Dec. 3, 1878	225	59	14	853
209, 901	Krauspe, Julius A. ( <i>See</i> Bush & Krauspe.)					
	Krebs, Carl, Vogelsdorf, near Berlin, Prussia. Steering paddle-wheel	Nov. 12, 1878	395	118	14	738
205, 877	Kreiter, August. ( <i>See</i> Hensel, Louis, assignor.)					
210, 260	Kregel, Louis G., Nebraska City, Nebr. Wind-engine	July 9, 1878	480	131	14	71
210, 480	Krehbiel, John, Williamsville, N. Y. Vehicle-spring	Nov. 26, 1878	806	239	14	800
202, 554	Kreis, Adam C., New York, N. Y. Connector for battery-carbons	Dec. 3, 1878	74	19	14	824
	Kreiter, Samuel, Silver Lake, Ind. Churn with swinging body and reciprocating dasher	Apr. 16, 1878	756	218	13	711
204, 582	Same Churn	June 4, 1878	153	50	13	1035
208, 684	Kremer, Frank W., and Thomas G. Williams, Akron, Ohio. Oatmeal-machine	Oct. 8, 1878	247	70	14	528
208, 183	Kress, George R., Pittsburg, Pa. Automatic-fan attachment	July 23, 1878	818	233	14	124
	Kreter & Anger. ( <i>See</i> Kreter, Rudolph, assignor.)					
203, 742	Kreter, Rudolph, assignor to Kreter & Anger, New York, N. Y. Child's folding carriage	May 14, 1878	543	154	13	901
201, 254	Kretsinger, William H., Fort Madison, Iowa. Rake	Mar. 12, 1878	440	136	13	487
203, 166	Same Scythe-fastener	Apr. 30, 1878	1416	413	13	807
209, 058	Same Fork	Oct. 15, 1878	609	192	14	589
203, 741	Kreutzberger, Frederic Guillaume, Paris, France. Grinding-machine	May 14, 1878	541	153	13	901
207, 426	Krey, George W. H., Brooklyn, N. Y. Egg-opener	Aug. 27, 1878	823	243	14	322
200, 205	Kribs, Charles Cramer, Trempealeau, Wis. Coffee-pot	Feb. 12, 1878	321	96	13	291
210, 615	Krick, Dennis S., and Nickolaus Raichard, Erie, Pa. Car-coupling	Dec. 10, 1878	258	70	14	806
209, 408	Krickl, Moritz, New York, N. Y. Stair-carpet fastener	Oct. 29, 1878	1049	305	14	650
203, 466	Krickmann, Henry, East New York, N. Y. Tool for removing pintle from hinge-joint	May 7, 1878	245	70	13	854
8, 442	Kritch, Jacob, Cleveland, Ohio, assignor, by mesne assignments, to Cleveland Axle Manufacturing Company. Machine for boring wagon-hubs (Reissue)	Oct. 1, 1878	221	63	14	518
201, 350	Kritch, Jacob, Cleveland, Ohio. Hub-boring machine	Mar. 19, 1878	562	172	13	511
205, 270	Same Fifth-wheel	June 25, 1878	918	273	13	1146
205, 965	Same Carriage-wheel hub	July 16, 1878	568	162	14	89
208, 828	Krueger, Henry. ( <i>See</i> Whyler, Edward, assignor.)					
	Krum, Henry, Cincinnati, Ohio. Pigment-furnace	Oct. 8, 1878	399	114	14	550
	Krupp, Frank. ( <i>See</i> Martens & Krupp.)					
198, 889	Kruse, Frederick, Coatsburg, Ill. Flour-bolt	Jan. 1, 1878	171	48, 49	13	85
208, 613	Same Flour and grain conveyer	Oct. 1, 1878	156	46	14	510
208, 183	Krutsch, Willis W., Delphos, Ohio. Stirrup-planing machine	Sept. 17, 1878	654	192	14	441
201, 021	Krutzsch, William, assignor to Buckeye Iron and Brass Works, Dayton, Ohio. Lath-head	Mar. 5, 1878	199	64	13	446
206, 026	Krutzsch, William, assignor to George R. and Frank M. Hoglen, Dayton, Ohio. Pinching-machine	July 18, 1878	627	181	14	97
207, 125	Krutzsch, William, assignor of one-half interest to William B. Anderson, Dayton, Ohio. Canceling-stamp	Aug. 20, 1878	501	151	14	276
207, 357	Kuball, Albert G., assignor of one-half interest to Charles P. Dittman, Cincinnati, Ohio. Umbrella	Aug. 27, 1878	752	224	14	313
198, 748	Kuempel, Frederic, Buffalo, N. Y. Sled-runner attachment for vehicles	Jan. 1, 1878	19	5	13	11
204, 156	Kuery, Florian, Peoria, Ill. Wash-board	May 28, 1878	1015	288	13	971
205, 490	Kuessner, Edward, and Ferdinand A. Vril, Cincinnati, Ohio. Attachment for baths	July 2, 1878	27	9	14	12
208, 910	Kühn, William, Buffalo, N. Y. Target	Oct. 15, 1878	501	145	14	567
207, 043	Kuhns, Benjamin. ( <i>See</i> Esterly, George, assignor)					
208, 525	Kuhns, Benjamin, Dayton, Ohio. Fertilizer-distributor	Aug. 13, 1878	401	125	14	260
208, 526	Kulp, Isaac R., Hatfield, Pa. Hay-press	Oct. 1, 1878	71	21	14	498
210, 542	Same same	Oct. 1, 1878	71	21	14	498
	Same same	Dec. 3, 1878	166	43	14	845
203, 350	Kulp, Jacob S. ( <i>See</i> Wolf, David C., assignor.)					
	Kummerer, Marcus C., and Charles W. Widney, Polo, Ill.; said Widney assignor to said Kummerer. Motive-power	May 7, 1878	117	24	13	836
203, 279	Kunkely, Max R., New York, N. Y. Tent, awning, &c	May 7, 1878	43	13	13	828
209, 816	Kunkle, Erastus Boice, Fort Wayne, Ind. Gage-cock	Nov. 12, 1878	310	92	14	728
210, 261	Same Water-gage for steam-boilers	Nov. 26, 1878	807	239	14	800
201, 987	Kinstler, Jakob, assignor to William W. Vasse, Thomas Hill, Mo. Hoof-parer	Mar. 26, 1878	912	278	13	565
203, 743	Kuntz, John, and Stephen F. Schroeder, Dubuque, Iowa. Vehicle-top	May 14, 1878	544	154	13	901
210, 128	Same Carriage-top	Nov. 19, 1878	653	194	14	776
206, 582	Kuntze, Julius, Hamburg, Germany. Car-coupling	July 30, 1878	1283	368	14	187
	Kupferle, John C. ( <i>See</i> White & Kupferle.)					
	Kurscheidt, A. E., et al. ( <i>See</i> Gröbli, Cafilach & Wehrli, assignors.)					
	Same ( <i>See</i> Rieter, Wehrli & Gröbli, assignors.)					
	Kurscheidt, F. A., et al. ( <i>See</i> Gröbli, Cafilach & Wehrli, assignors.)					
	Same ( <i>See</i> Rieter, Wehrli & Gröbli, assignors.)					
204, 583	Kurscheidt, Frederick H. ( <i>See</i> King, George E., assignor)					
208, 104	Kurtz, John G., and Thomas J. Kister, Milton, Pa. Fire-escape	June 4, 1878	154	51	13	1035
203, 841	Kurtz, Joseph M., Weston, Mo. Glazier's square and rule	Sept. 17, 1878	563	168	14	429
	Kurtzmann, John O., assignor of one-half interest to E. Wells Sackett, New York, N. Y. Bronzing-machine	May 21, 1878	658	187	13	922
208, 829	Kurz, Christoph F., Newark, N. J. Low-water indicator for steam-boilers	Oct. 8, 1878	399	114	14	550
206, 461	Kutnow, Sigismund, San Francisco, Cal. Sample-card	July 30, 1878	1155	331	14	171
204, 341	Kutscheer, Louis, Bridgeport, Conn. Bottle-stopper fastener	May 28, 1878	1208	344	13	996
	Kwozalla, Alois. ( <i>See</i> Meahl & Kwozalla.)					
208, 019	Kyle, John, Glasgow, North Britain, assignor to Joshua and John Siddely, Liverpool, England. Process and apparatus for making ice	Sept. 17, 1878	480	144	14	418

*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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198, 947	Kyle, William, Cleveland Ohio. Ladder-scaffold .....	Jan. 8, 1878	237	68	13	52
	Labar, Jesse. (See Rice & Labar.) .....					
199, 452	Labelle, Charles Henry, Keeseville, N. Y. Reversible latch .....	Jan. 22, 1878	759	223	13	142
	La Brash, Anthony C. (See Rickard & La Brash.) .....					
207, 187	Lacey, Griffin S., New York, N. Y. Gas-regulator .....	Aug. 20, 1878	562	169	14	283
205, 192	Lacey, John J., San Francisco, Cal. Device for opening and closing hatchway-doors .....	June 25, 1878	832	247	13	1134
201, 425	Lackey, G. Oram, Akron, Ohio. Bag-machine .....	Mar. 19, 1878	636	{ 194 195 }	13	522
	Lackmann, Herman. (See Deveson & Lackmann.) .....					
203, 423	La Cour, Poul, Copenhagen, Denmark. Isochronous and synchronous movement for telegraphic and other lines .....	May 7, 1878	195	56, 57	13	847
8, 468	Lacy, John, and George B. Cornell, Chicago, Ill.; said Lacey assignor to said Cornell. Bung-wrench .....	Oct. 29, 1878	1196	347	14	671
203, 924	Ladd, Arnaldo W. P., San Francisco, Cal. Self-tapping can-funnel .....	May 21, 1878	745	214	13	934
207, 607	Ladd, Dennis O'B., assignor of one-half interest to George Farnsworth, Chicago, Ill. Valve-gear .....	Sept. 3, 1878	23	8	14	352
207, 608	Same. Automatic governor and cut-off for engines .....	Sept. 3, 1878	24	9	14	352
	Ladomus, Lewis. (See Powell, Thomas, assignor.) .....					
	La Dow, Charles. (See Crane, Elisha, assignor.) .....					
	Same. (See Johnson, Moses, assignor.) .....					
8, 157	La Dow, Charles, Albany, N. Y. Horse hay-rake .....	Apr. 2, 1878	240	70	13	633
8, 159	Same. Harrow-cultivator .....	Apr. 9, 1878	491	144	13	672
204, 050	Ladow, Jacob S., Mechanicsville, N. Y. Water-wheel gate .....	May 21, 1878	880	252	13	951
205, 654	Lafferty, Erastus S., Saltsburg, Pa. Fastening for horse-collars .....	July 2, 1878	200	60	14	34
201, 426	Lafin, Matthew, and Sterling Elliott, Chicago, Ill. Egg-carrier .....	Mar. 19, 1878	639	195	13	522
202, 834	Lafin, Matthew, Chicago, Ill. Compound for lining barrels, &c. ....	Apr. 23, 1878	1070	.....	13	758
201, 022	La Fonte, James Guy, assignor to Hiram G. Farr, Indianapolis, Ind. Treatment of wood for corset-stays, &c. ....	Mar. 5, 1878	200	.....	13	446
199, 722	La Grange, John Peter, Ashtabula, Ohio. Boiler washing-machine .....	Jan. 29, 1878	1064	311	13	198
202, 835	Lahaussois, Maxime, Paris, France. Hay and cotton press .....	Apr. 23, 1878	1071	306	13	758
207, 663	Lahmeyer, John, Fort Wayne, Ind. Car-coupling .....	Sept. 3, 1878	81	25	14	359
199, 723	Laidley, Theodore T. S., United States Army. Powder for cannons .....	Jan. 29, 1878	1064	311	13	198
205, 194	Laine, Henri, Paris, France. Ice-locomotive .....	June 25, 1878	834	247	13	1134
	Laird, Hilamon Spencer. (See Landecker & Laird.) .....					
202, 555	Laird, William A., assignor of one-half interest to G. L. Faust and W. L. Warren, Ossian, Iowa. Three-horse draft-equalizer .....	Apr. 16, 1878	757	219	13	711
207, 358	Laird, William H., Mendon, Mich. Photographic-printing frame .....	Aug. 27, 1878	754	225	14	313
210, 129	Lake, Ezra B., Delanco, N. J. Venetian blind .....	Nov. 19, 1878	654	194	14	116
200, 314	Lake, J. Christopher, Camden, N. J. Curtain-fixture .....	Feb. 12, 1878	434	129	13	306
201, 023	Same. Curtain-fixture and bracket .....	Mar. 5, 1878	201	64	13	446
210, 357	Lake, J. Christopher, Philadelphia, Pa. Spring shade-roller .....	Nov. 26, 1878	892	262	14	810
210, 097	Lake, J. Christopher, Camden, N. J. Adjustable suspension-bracket .....	Dec. 10, 1878	340	93	14	877
205, 966	Lakin, James A., Westfield, Mass. Presser-foot for sewing-machines .....	July 16, 1878	569	163	14	90
208, 911	Same. Hem-stitching attachment for sewing-machines .....	Oct. 15, 1878	502	145	14	567
209, 972	Same. Regulator for boilers and furnaces .....	Nov. 19, 1878	488	148	14	753
	Lalance & Grosjean Manufacturing Company. (See Chaumont, Jules, assignor.) .....					
	Same. (See Grosjean, Florian, assignor.) .....					
	Same. (See Musgrove, Joseph, assignor.) .....					
8, 212	Lalor, Thomas, Toronto, Canada, assignor, by mesne assignments, to William F. Beasley, Baltimore, Md. Indicator-lock .....	May 7, 1878	303	87	13	862
8, 213	Same. Register for indicator-locks .....	May 7, 1878	305	87	13	862
208, 404	Lamb, Amos A., Boston, Mass., assignor to Frederick M. Sherman, New London, Conn. Pump-plunger .....	Sept. 24, 1878	894	261	14	475
210, 787	Lamb, Chancy, assignor to C. Lamb & Sons, Clinton, Iowa. Hanging gang-saws .....	Dec. 10, 1878	435	121	14	889
206, 027	Lamb, J. W. (See Brooks, William, assignor.) .....					
	Lamb, James R., Saint James, Minn. Car-coupling .....	July 16, 1878	629	182	14	97
	Lamb Knitting Machine Manufacturing Company. (See Denzler, Frederick, assignor.) .....					
	Lamb, Richard. (See Brown, David F., assignor.) .....					
	Lamb & Sons, C. (See Lamb, Chancy, assignor.) .....					
207, 044	Lamb, Thomas, Philadelphia, Pa. Sewing-machine .....	Aug. 13, 1878	401	128	14	260
8, 150	Lamb, W. A. (See Kirk, David, assignor.) .....					
203, 467	Lamb, Willard, Green Bay, Wis. Log-carriage for saw-mills. ....	Apr. 2, 1878	232	67	13	632
203, 052	Same. Log-carriage gear for saw-mills .....	May 7, 1878	245	71	13	854
210, 543	Lamb, William M., Stanardsville, Va. Tool .....	Apr. 30, 1878	1296	376	13	792
	Lambert, Aloysius A., assignor of two-thirds interest to Mathias Benner and John P. Barrett, Chicago, Ill. Reflector for electric lights .....	Dec. 3, 1878	166	44	14	845
	Lambert, François A. (See Davies & Lambert.) .....					
	Lambert, John. (See Holliday & Lambert.) .....					
201, 537	Lambert, Joseph H., Philadelphia, Pa. Haversack .....	Mar. 19, 1878	750	228	13	538
208, 912	Lambie, Robert M., New York, N. Y. Folding table .....	Oct. 15, 1878	502	145	14	567
207, 427	Lamboy, Philip, Schenectady, N. Y. Broom-handle .....	Aug. 27, 1878	823	244	14	322
	Lameraux, Jules. (See Stephens & Lameraux.) .....					
8, 181	Lamont, Alexander, et al. (See Lamont, James, assignor.) .....					
	Lamont, James, assignor to John and Alexander Lamont, Rochester, N. Y. Razor-strop .....	Apr. 16, 1878	837	241	13	721
	Lamont, John, et al. (See Lamont, James, assignor.) .....					
209, 274	La Montagne, Walter, Detroit, Mich. Toy .....	Oct. 22, 1878	906	264	14	626
	Lamphere, C. W. (See Williams, Edwin, assignor.) .....					
207, 359	Lamprecht, Hugo, jr., assignor to Hugo Lamprecht, sr., New York, N. Y. Rocking-chair .....	Aug. 27, 1878	754	225	14	314
205, 104	Lamson, Jerome, and James Brotherton, Waverly, Iowa. Vehicle-top adjuster .....	June 18, 1878	724	215	13	1115
200, 461	Lamson, Rodolph M., Vevay, Ind. Pitman-connection .....	Feb. 19, 1878	590	174	13	340
210, 862	Lancaster, Joseph R., assignor to Open Stove Ventilating Company, New York, N. Y. Fire-place heater .....	Dec. 17, 1878	525	148	14	900
8, 474	Lancaster, William, Constadt, Germany, and John Bullough, Acerington, England. Machine for drying and beaming yarn .....	Oct. 29, 1878	1201	349	14	672
199, 983	Land, William Henry, Des Moines, Iowa, assignor of one-half interest to Joseph Boyd, Marlborough, Mass. Shoe .....	Feb. 5, 1878	92	30	13	247
199, 824	Landecker, Lazaré, and Hilamon Spencer Laird, San Luis Obispo, Cal. Nut-lock .....	Jan. 29, 1878	1170	343	13	214
206, 583	Lander, Benjamin, Brooklyn, N. Y. Sash-fastener .....	July 30, 1878	1284	369	14	187
210, 544	Lander, George, Pittsburg, Pa. Paper-folding machine .....	Dec. 3, 1878	167	44	14	845
	Landers, Fray & Clark. (See Mosman & Webb, assignors.) .....					
200, 140	Landis, Amos J., Columbia City, Ind. Lifting-jack .....	Feb. 12, 1878	259	77	13	281
206, 884	Landis, Ananias, Salem, Ohio. Grain-drill hoe .....	Aug. 13, 1878	248	78	14	241
208, 830	Landis, Henry, Reading, Pa. Station-indicator .....	Oct. 8, 1878	400	115	14	550

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	Landis, Israel L. (See Iske, Anthony, assignor.)					
204, 342	Landon, Asa George, and Brenton Decker, Troy, Pa. Trace-buckle	May 28, 1878	1209	344	13	996
210, 338	Landon, Benjamin, Canton, Pa. Mail-bag	Nov. 26, 1878	894	262	14	811
202, 836	Landreth, Wilkinson McL., Johnson City, Tenn. Fence	Apr. 23, 1878	1072	306	13	758
203, 468	Lane, Atlee W., Philadelphia, Pa. Window-shade	May 7, 1878	246	71	13	854
202, 556	Lane, Augustus R., New York, N. Y. Coupling for telegraph-wires	Apr. 16, 1878	758	219	13	711
	Lane & Bodley Company. (See Randolph, Simon P., assignor.)					
203, 626	Lane, Calvin Morgan, and Mathew Calhoun Franklin, Lockhart, Tex. Saddle-tree fork	May 14, 1878	420	120	13	885
200, 903	Lane, Charles William, Aurora, Nev. Safety attachment for hoisting-cages	Nov. 12, 1878	396	119	14	738
	Lane, Chester J. (See Collier & Lane.)					
208, 246	Lane, David H., Anoka, Minn. Rotary plow	Sept. 24, 1878	733	215	14	454
200, 546	Lane, Dennis, assignor to Lane Manufacturing Company, Montpelier, Vt. Machine for sawing shingles	Feb. 19, 1878	674	108	13	352
203, 469	Lane, Dennis, Montpelier, Vt. Saw-mill dog	May 7, 1878	247	71	13	854
	Lane, E. H., et al. (See Allen, Norman, assignor.)					
207, 609	Lane, Frederic A., assignor of one-half interest to Paschal Converse, New Haven, Conn. Pendulum	Sept. 3, 1878	25	9	14	352
	Lane, Henry C. (See Allen & Lane.)					
204, 902	Lane, John, Chicago, Ill. Plow	June 18, 1878	527	154	13	1089
204, 903	Same. Vehicle-wheel hub	June 18, 1878	527	154	13	1089
205, 491	Same. Plow	July 2, 1878	28	9	14	12
205, 752	Lane, John, assignor of one-half interest to Chicago Plow Manufacturing Company, Chicago, Ill. Sulky-plow	July 9, 1878	326	94, 95	14	54
209, 174	Lane, John, Hyde Park, Ill. Plow	Oct. 22, 1878	899	235	14	612
209, 175	Same. Sulky-plow	Oct. 22, 1878	810	235	14	613
203, 744	Lane, Julius S., Akron, Ohio. Combined clutch and brake of hoisting-drums for elevators, &c.	May 14, 1878	546	154	13	901
	Lane Manufacturing Company. (See Lane, Dennis, assignor.)					
208, 744	Lane, Matthew, New York, N. Y. Process for ripening fruit	Oct. 8, 1878	309	88	14	537
209, 902	Lane, Peter, Elwood, Ind. Fence	Nov. 12, 1878	396	118	14	738
206, 952	Lane, William Foster, Elgin, Ill. Foot-power	Aug. 13, 1878	315	96	14	249
203, 627	Lane, William J., Millbrook, N. Y. Measuring faucet	May 14, 1878	421	120	13	886
210, 788	Lane, Zenas M., Rockland, and Warren S. Hill, Boston, Mass. Time-registering clock	Dec. 10, 1878	436	121, 122	14	889
202, 178	Lang, William S., Lithopolis, Ohio. Pump	Apr. 9, 1878	345	101	13	652
	Lang & Co., E. M. (See Postwick, Jabez A., assignor) (Reissue.)					
	Lang, Michael G. (See Risser & Lang.)					
	Langdon, William H. (See Ganoung & Langdon.)					
	Lang, John H. C. (See Hesse, Ernst A. C., assignor.)					
108, 987	Lang, Julius, and Alwin Eisenbaum, Lodz, Poland, Russia. Anti-friction bearing for rotary shafts and axles	Jan. 8, 1878	279	80	13	59
8, 228	Langford, Charles F., Brooklyn, N. Y. Seam of boots and shoes	May 14, 1878	620	173	13	909
201, 024	Langham, Thomas, Elwood, N. J. Knitting-machine	Mar. 5, 1878	203	64	13	448
200, 206	Langham, William, Cedar Rapids, Iowa. Metallic fence-post	Feb. 12, 1878	322	96	13	291
201, 797	Langlois, Peter, Port Henry, N. Y. Sewing-machine	Mar. 26, 1878	1024	313	13	582
199, 160	Langstaff, James, Cleveland, Ohio. Stone-sawing machinery	Jan. 15, 1878	466	137	13	88
	Langstroth, Thomas W. (See Brettell, Edward W., assignor.)					
204, 832	Lanphear, Edwin T., Phenix, R. I. Spinning ring and traveler	June 11, 1878	454	127	13	1071
205, 955	Same. Ring-spinning frame	July 2, 1878	201	60	14	35
210, 863	Lansburgh, Max, Baltimore, Md. Process and apparatus for aging and improving distilled liquors	Dec. 17, 1878	526	148, 149	14	910
204, 157	Lanston, Tolbert, Washington, D. C. Sewing-machine chair	May 28, 1878	1010	289	13	971
203, 549	Lanstrom, Reinhold, assignor to John G. Isham and Reuben F. Hughes, Cincinnati, Ohio. Artificial slate-pencil	May 14, 1878	353		13	877
	Lanterman, Ross McC. (See Holmes, John Bull, assignor.)					
	Lantis, William, et al. (See Forlow, Jacob, assignor.)					
209, 904	Lapham, Amos F., Marion, Ohio. Device for drawing and measuring liquids	Nov. 12, 1878	398	119		738
200, 547	Lapham, Edward V., Morrison, Ill. Manufacture of cheese	Feb. 19, 1878	676	199	13	353
	Lapham, Joseph H. (See Sargent, James T., assignor.)					
207, 664	Lapham, Rufus, New York, N. Y. Device for setting and skimming milk	Sept. 3, 1878	82	25	14	359
209, 060	Lapierre, Alexander N., assignor to Christian Claassen, New York, N. Y. Sheet-metal can	Oct. 15, 1878	674	194	14	589
	Larabee, John W. (See Brewster, Francis A., assignor.)					
206, 396	Laraway, George W., Hartford, Conn., assignor to American Paper Barrel Company. Manufacture of barrel-heads and other articles from paper-pulp	July 30, 1878	1084	310, 311	14	102
207, 811	Laraway, Orlo Melvin, and George Samuel King, Minneapolis, Minn. Horse-hay-rake	Sept. 10, 1878	242	76	14	383
204, 904	Large, Andrew T., Chicago, Ill. Coffin fastening	June 18, 1878	528	154	13	1089
	Larkin, James. (See McCaffrey & Larkin.)					
200, 548	Larkin, Samuel, Bridgeport, Conn. Seal-press	Feb. 19, 1878	676	199	13	353
207, 610	Larabee, Frank E., Lynn, Mass. Machine for finishing boot and shoe soles	Sept. 3, 1878	25	9	14	352
201, 538	Larabee, Samuel W., Salem, Mass. Cake holder and cooler	Mar. 19, 1878	751	229	13	538
	Larsen, John. (See Galloway & Larsen.)					
201, 798	Larsen, Niels C., Elgin, Ill. Measuring-gage	Mar. 26, 1878	1025	313	13	582
203, 470	Larson, Frank, and Frederick D. Livermore, Rochester, Minn. Sleigh-knee	May 7, 1878	248	71	13	854
201, 427	Larwill, Alfred L., Port Royal, assignor to self and George W. Roberts, Beaufort, S. C. Grapple	Mar. 19, 1878	640	195	13	522
200, 462	Lasater, James Mitchell, assignor to R. L. Lasater, Manchester, Tenn. Hano	Feb. 19, 1878	590	174	13	340
	Lasater, R. L. (See Lasater, James Mitchell, assignor.)					
	Lash, Abram. (See Sinclair, James A., assignor.)					
201, 799	Lash, John F., Toronto, Canada. Curtain-fixture	Mar. 26, 1878	1026	313	13	582
198, 988	Lash, Nathaniel, Ellsworth, Ill. Signal-lantern	Jan. 8, 1878	280	81	13	79
201, 800	Lasky, Stephen, Chicago, Ill. Overalls	Mar. 26, 1878	1026	313	13	582
205, 801	Same. same	July 9, 1878	381	100	14	60
	Lasnier, Etienne. (See Hénard & Lasnier.)					
	Latham, Charles. (See Eaton & Latham.)					
	Lathrop, George H., et al. (See Stockham, Jerome B., assignor.)					
205, 715	Latta, Emmet G., Friendship, assignor of one-half interest to Harvey D. Blakeslee, Buffalo, N. Y. Trace-buckle	July 2, 1878	267	79	14	42
208, 970	Lattin, Ambrose J., San Francisco, Cal. Spring-bed	Oct. 15, 1878	577	168	14	577
199, 374	Lau, Albert H., San Francisco, Cal. Whip-socket	Jan. 22, 1878	687	202	13	131
210, 864	Laubscher, Louis, Fort Wayne, Ind. Testing bridges	Dec. 17, 1878	528	149	14	910
204, 983	Laude, Joseph, Monticello, Ark. Seed-planter	June 18, 1878	607	178	13	1099
208, 614	Lauder, George, Pittsburg, Pa. Galvanic battery	Oct. 1, 1878	157	46	14	510
208, 831	Same. Paper-folding machine	Oct. 8, 1878	401	115, 116	14	550

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201, 428	Lauderbach, Charles J., assignor to self and Robert C. Albree, Allegheny, Pa. Suspendersocket. (See Bowman, Hezekiah J., assignor.)	Mar. 10, 1878	641	195	13	522
199, 557	Lauffer, Josiah B., Harrison City, Pa. Boot-jack	Jan. 22, 1878	870	255	13	161
190, 984	Lauffer, Simon D., assignor of three-fourths interest to Aaron H. Heasley, Cyrus F. Bilhimer, and William Williams, Irwin Station, Pa. Burglar-alarm	Feb. 5, 1878	93	30	13	247
210, 339	Lauga, Charles, assignor of one-half interest to Clement B. and George B. Penrose, New Orleans, La. Separating and cleaning vegetable fiber for paper-pulp	Nov. 26, 1878	895	202	14	811
210, 042	Laughlin, Joseph M. (See Sumner, James D., assignor.)					
	Laughlin, Shakespeare M., East Liverpool, Ohio. Detachable metallic cover for vessels made of pottery, glass, &c.	Nov. 10, 1878	561	168	14	763
208, 615	Laur, Francis, Paris, France. Manufacture of sulphate of alumina	Oct. 1, 1878	158		14	510
199, 835	Laurent, Jacques, New York, N. Y. Watch-case spring	Jan. 29, 1878	1171	343	13	214
204, 742	Lausten, Andrew C., and Alfred B. Lawther, Chicago, Ill. Material for oil-presses	June 11, 1878	331	100	13	1062
201, 801	Lauster, David, Buffalo, N. Y. Safety-bridle	Mar. 26, 1878	1027	314	13	582
208, 980	Lauten, Frank H., New York, N. Y. Paper-feeding apparatus	Oct. 15, 1878	577	168	14	577
	Lautenschlager, Jacob, sr. (See Lautenschlager, John, assignor.)					
200, 207	Lautenschlager, John, Ashland, Ky., assignor to Jacob Lautenschlager, sr., Dayton, Ohio. Piano-tuning pin	Feb. 12, 1878	323	97	13	291
	Lauterbach, John, et al. (See Roberts, Edward J., assignor.)					
210, 616	Lauth, Bernard C., Pittsburgh, Pa. Manufacture of railway-rails	Dec. 10, 1878	259	71	14	866
205, 753	Lauth, Jacob, Chicago, Ill. Thill-coupling	July 9, 1878	328	95	14	54
208, 184	Lavalotte, William A., Washington, D. C. Printing-press	Sept. 17, 1878	655	102	14	441
	Laverty, Thomas D. (See Laverty, William A., assignor.)					
207, 288	Laverty, William A., Philadelphia, Pa., assignor to Thomas D. Laverty, Camden, N. J. Neck-tie folder	Aug. 20, 1878	668	198	14	297
202, 838	Lavey, Joseph E., Huntington County, Ind. Watchmaker's lathe-chuck	Apr. 23, 1878	1074	307	13	759
208, 020	Law, Abram H., assignor of one-half interest to James A. Sherrieff, Aledo, Ill. Check-row attachment for corn-planters	Sept. 17, 1878	482	144	14	418
	Law, George M. (See Davis, Alexander S., assignor.)					
203, 280	Law, John W., Bloomington, Ill. Motor for operating pumps	May 7, 1878	45	14	13	826
203, 281	Same. Draw-bar for street-cars	May 7, 1878	45	14	13	826
207, 812	Lawler, A. Brown, Frederickville, Ill. Wagon-seat	Sept. 10, 1878	243	76	14	383
202, 952	Lawrence, Edwin, Hyde Park, England. Spiko	Apr. 30, 1878	1202	847	13	779
206, 679	Lawrence, Franklin M., Portland, Me. Grate	Aug. 6, 1878	24	7	14	210
199, 836	Lawrence, Jacob H., Schenectady, N. Y. Device for operating reciprocating churn-dashers	Jan. 29, 1878	1172	344	13	214
206, 028	Lawrence, James W., assignor to Walter S. Lawrence, New York, N. Y. Refrigerator	July 16, 1878	630	182	14	97
	Lawrence, John H. (See Upham, Andrew J., assignor.)					
204, 833	Lawrence, John N., Williamsburg, Brooklyn, N. Y. Adjustable dummy	June 11, 1878	435	127	13	1073
206, 953	Lawrence, Lorenzo B., Monticello, Cal., and Alfred G. Strawbridge, Sharon, Pa. Stove attachment	Aug. 13, 1878	316	96	14	249
202, 557	Lawrence, Theodore C., Ladoga, assignor of one-half interest to James T. Mack, Crawfordsville, Ind. Wagon-brake lever	Apr. 16, 1878	759	219	13	712
	Lawrence, Walter S. (See Lawrence, James W., assignor.)					
202, 837	Lawrence, William E., and Charles E. L. Holmes, New York, N. Y. Curry-comb	Apr. 23, 1878	1073	307	13	758
199, 296	Lawson, James A., Troy, N. Y. Stove-grate	Jan. 15, 1878	599	175	13	109
201, 255	Same. Fire-box for stoves	Mar. 12, 1878	441	136	13	487
201, 256	Same. Cooking-stove	Mar. 12, 1878	442	136	13	488
206, 252	Same. same	July 23, 1878	895	255	14	134
204, 834	Lawson, Peter B., Cold Spring, N. Y. Centrifugal machine	June 11, 1878	436	128	13	1073
	Lawson, William C. (See Buckley, William Henry, assignor.)					
206, 584	Lawson, William C., Brooklyn, N. Y. Pattern-marked fabric for garments	July 30, 1878	1285	369	14	187
	Lawther, Alfred B. (See Lausten & Lawther.)					
199, 297	Lawther, Alfred B., Chicago, Ill. Hydraulic press	Jan. 15, 1878	600	175	13	109
200, 549	Same. Artificial honey-comb	Feb. 19, 1878	677	199	13	353
202, 839	Same. Machine for treating oleaginous seeds for the extraction of oil	Apr. 23, 1878	1074	307	13	759
200, 618	Lawton, Charles A., De Pere, Wis. Line-bin	Feb. 26, 1878	764	224	13	374
	Lawton, Harold. (See Howland & Lawton.)					
202, 558	Lawton, William D., San Francisco, Cal. Manufacture of shirts	Apr. 16, 1878	760	219	13	712
208, 685	Lay, Joseph, Olmsted Falls, Ohio. Broom	Oct. 8, 1878	249	71	14	530
210, 608	Lay, Oliver B., deceased, William L. Lay, Oil City, Pa., administrator and assignor to Eaton, Cole & Burnham Company. Pipe-tongs	Dec. 10, 1878	342	93, 94	14	877
	Lay, William L., administrator. (See Lay, Oliver B.)					
207, 611	Leach, C. Bingham, et al. (See Marawville, Galusha, assignor.)					
	Leach, Charles, Warsaw, assignor of one-half interest to George W. Adams, Allerton, Iowa. Draft-equalizer	Sept. 3, 1878	26	10	14	352
199, 213	Leach, Charles J., Hartford Township, Van Buren County, Mich. Saw-mill dog	Jan. 15, 1878	517	152	13	96
203, 628	Leach, Daniel Rogers, Pike, N. Y. Portable fence	May 14, 1878	422	121	13	886
	Leach, Edwin Ezekiel. (See Canedy & Leach.)					
203, 167	Leach, Edwin E., Cedar Rapids, Iowa. Combined anvil and vise	Apr. 30, 1878	1416	413	13	807
209, 484	Leach, Joseph D., Penobscot, Me. Broom-holder	Oct. 29, 1878	1130	330	14	662
	Leach, Stephen. (See St. Clair, Harry L., assignor.)					
205, 967	Leach, William B., Chillicothe, Mo. Coin-holder	July 16, 1878	570	163	14	90
	Leaman, Samuel. (See Buzzard & Snyder, assignors.)					
207, 533	Leathers, John C., Piqua, Ohio. Vehicle-spring support	Aug. 27, 1878	939	276	14	336
206, 029	Leavitt, Albert, Boston, assignor to David Whittemore, Quincy, Mass. Sewing-machine	July 16, 1878	631	182	14	98
211, 026	Leavitt, Charles, Cleveland, Ohio. Elevated street-railway	Dec. 17, 1878	724	199	14	933
201, 429	Leavitt, E. D., Jr., Cambridge, Mass., and Washington Jones, Philadelphia, Pa. Steam-cylinder with steam-jacket	Mar. 19, 1878	642	196	13	522
204, 056	Leavitt, John B. D., Lebanon, N. H. Planing-machine	May 21, 1878	886	254	13	952
201, 021	Leavitt, Rufus, Boston, Mass. Shuttle for sewing-machines	Sept. 17, 1878	483	144	14	418
	Leavitt, William A. (See Perry, Frank W., assignor.) (Reissue.)					
	Same. same					
202, 111	Le Blond, Napoleon, Farmington, Minn. Rosette for bridges	Apr. 9, 1878	269	79	13	642
208, 616	Le Boulengé, Paul Emile, Liege, Belgium. Torpedo-signals for railways	Oct. 1, 1878	159	47	14	510
	Le Caud, Fred. J. V. (See Stietenroth, Andrew L., assignor.)					
202, 443	Leckie, Robert Gilmour, Acton Vale, Quebec, Canada. Separating sulphur from its ores	Apr. 16, 1878	630	184	13	696
199, 724	Le Clerc, Jean Baptiste, and Maximilian A. Cachot, San Francisco, Cal. Ore-amalgamator	Jan. 29, 1878	1065	311	13	198



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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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202, 035	Leclerc, Francis, assignor to self, Glaucus H. Bounaffon, and George E. Buckley, Philadelphia, Pa. Automatic fire-extinguisher.....	Apr. 2, 1878	174	51	13	624
	Le Comte, Joseph, <i>et al.</i> (See Perkins, George H., assignor.)					
	Same..... (See Perkins, George H. and James H., assignors.)					
	Le Compto & Perkins Manufacturing Company (limited) <i>et al.</i> (See Perkins, George H. and James H., assignors.)					
206, 801	Leddy, Thomas Mathew, McComb City, Miss. Stay-bolt for boilers.....	Aug. 6, 1878	148	46	14	225
207, 970	Lederer, Samuel M., New York, N. Y. Snow-melting machine.....	Sept. 10, 1878	415	125	14	405
	Ledig & Son, A. (See Ledig, August, assignor.)					
206, 585	Ledig, August, assignor to A. Ledig & Son, Philadelphia, Pa. Cuspadore.....	July 30, 1878	1286	370	14	187
201, 803	Ledyard, John W., Detroit, Mich. Spark arrester and extinguisher.....	Mar. 26, 1878	1029	314	13	582
203, 053	Lee, Albert, Charleston, Ill. Harrow and cultivator combined.....	Apr. 30, 1878	1297	376	13	792
205, 107	Lee, Albro, Massillon, Ohio. Gate.....	June 18, 1878	726	216	13	1115
	Lee, Charles B. (See Jenkins, Caldwell C., assignor.)					
200, 735	Lee, Frederick C., Ridgefield, Conn. Hub-attaching device.....	Feb. 26, 1878	889	261	13	392
209, 485	Lee, Frederick J., and John S. Ransdell, Harrisburg, Ky.; said Ransdell assignor to said Lee. Gate-latch.....	Oct. 20, 1878	1130	330	14	662
200, 736	Lee, George W., Ridgewood, N. Y. Wooden brush for scrubbing.....	Feb. 20, 1878	890	261	13	392
	Lee, James, Jr. (See Dowling, John, assignor.)					
	Lee, John. (See Edwards & Lee.)					
200, 067	Lee, Mark, Highlandville, Mass. Postal card.....	Feb. 5, 1878	176	57	13	280
201, 802	Same..... Dynamometer for testing the strength of yarn.....	Mar. 26, 1878	1028	314	13	582
204, 584	Lee, Thomas L., Paducah, Ky. Dredging-machine.....	June 4, 1878	155	51	13	1035
201, 680	Leermo, Eric O., Gold Hill, Nev. Pump suction-pipe.....	Mar. 26, 1878	913	279	13	565
208, 917	Same..... Suction-pipe for pumps.....	Oct. 1, 1878	160	47	14	511
209, 005	Lees, Miles, Providence, R. I. Gas-regulator.....	Nov. 12, 1878	399	119	14	738
201, 351	Lees, Thomas, assignor to Samuel R., William E., and Walter T. Carrington, Stockport, England. Machine for curling hat-brims.....	Mar. 10, 1878	564	173	13	511
202, 732	Lees, Thomas, Chester, Pa. Bill-tile.....	Apr. 23, 1878	955	274	13	744
208, 105	Leeson, William Robert, Bridgewater, England. Spanner or wrench.....	Sept. 17, 1878	564	168	14	430
208, 247	Leet, Charles D., and Henry A. Chapin, Springfield, Mass. Metallic cartridge.....	Sept. 24, 1878	736	215	14	454
206, 954	Leete, John W., South Meriden, Conn., assignor to Nelson Lyon, Albany, N. Y. Clamp for holding bolts from turning.....	Aug. 13, 1878	317	97	14	249
205, 193	Lefever, Daniel M., Syracuse, N. Y. Breech-loading fire-arm.....	June 25, 1878	833	247	13	1134
202, 112	Leflor, Frederick C., Alnaworth, Iowa. Cultivator.....	Apr. 9, 1878	270	80	13	642
203, 629	Leger, Edward, Chicago, Ill. Show-stand.....	May 14, 1878	423	121	13	886
207, 045	Leggett, Clinton H., New York, N. Y. Package for tar.....	Aug. 13, 1878	402	125	14	280
205, 968	Leggett, Edward W., Elizabeth, N. J. Apparatus for cooling and spreading glue.....	July 16, 1878	571	163	14	90
210, 130	Leggett, Edward W., Elizabeth, N. J., assignor of one-fourth interest to Hugo Scherring, New York, and Joseph Glatz, Brooklyn, N. Y. Spreading and drying glue.....	Nov. 10, 1878	656	195	14	776
202, 444	Legouge, Louis F. A., St. Georges-la-Trétoire, France. Scraping-tool.....	Apr. 10, 1878	631	184	13	606
200, 737	Lehlbach, Gustav, Newark, N. J. Railway-track.....	Feb. 26, 1878	891	262	13	392
8, 168	Lehmann, Fred. A. (See Rhind, Frank, assignor.)					
210, 789	Lehmann, Henry, Cleveland, Ohio. Barrel-pitching machine..... (Reissue.)	Apr. 9, 1878	504	147	13	674
	Lehmann, William, Menominee, Mich. Fifth-wheel coupling.....	Dec. 10, 1878	438	122	14	839
	Leibold, Ferdinand. (See Pfeifer & Ulrich, assignors.)					
	Leickem, Peter. (See Kelter & Leickem.)					
199, 296	Leidolf, Friedrich J., Chicago, Ohio. Horse-detacher.....	Jan. 15, 1878	601	175	13	109
201, 025	Leidy, James C., Galesburg, Ill. Sulky-plow.....	Mar. 5, 1878	204	64, 65	13	446
200, 463	Leighton, Dominicus R. (See Leighton, James T. and Dominicus R.)					
	Leighton, George A., assignor of one-half interest to William Corey, Manchester, N. H. Circular-knitting machine.....	Feb. 19, 1878	591	{ 174 175 }	{ 13 13 }	340
206, 253	Leighton, James T. and Dominicus R., New Haven, Conn. Railway-car.....	July 23, 1878	897	250	14	134
208, 527	Leighton, William, Jr., Wheeling, W. Va. Glass-furnace.....	Oct. 1, 1878	72	21	14	499
205, 878	Leimbach, Jacob, and George H. Wilson, Oakaloosa, Iowa. Corn-planter.....	July 9, 1878	462	131	14	71
201, 648	Leiner, Moritz, New York, N. Y. Brush.....	Mar. 26, 1878	913	279	13	565
199, 915	Leland, Edwin A., assignor, by mesne assignments, to T. C. Miles and J. B. Kiddoo, New York, N. Y. Machine-gun.....	Feb. 5, 1878	30	9	13	237
203, 842	Leland, Edwin A., assignor, by mesne assignments, to Thomas C. Miles, New York, N. Y. Bending plumbers' traps.....	May 21, 1878	660	187	13	823
206, 586	Leland, Somers S., Quincy, Mich. Halter.....	July 30, 1878	1286	370	14	187
	Le Lubez, Pierre Aimable Victor. (See Atkinson, James, assignor.)					
199, 453	Le Mar, Oliver W., assignor of one-half interest to A. M. Judy, New Burlington, Ohio. Saw-filing machine.....	Jan. 22, 1878	759	{ 223 224 }	{ 13 13 }	143
207, 289	Lemennier, Louis Francois Jean, and Emile Gerard, Paris, France. Apparatus for heating railway-carriages, &c.....	Aug. 20, 1878	668	198	14	297
208, 321	Lemieux, John Bt., assignor of one-half interest to Alexandor Rodgers, Muskegon, Mich. Jack-chain for saw-mills.....	Sept. 24, 1878	813	237	14	464
202, 840	Lemon, William T., Detroit, Mich. Knitting-machine.....	Apr. 23, 1878	1076	{ 307 308 }	{ 13 13 }	759
199, 725	Lenard, William R., assignor to self and James S. Rodecker, Waco, Tex. Bale-tie.....	Jan. 20, 1878	1066	312	13	198
202, 445	Lennartson, Gustava, Erie, Pa. Miter-machine.....	Apr. 16, 1878	632	185	13	696
198, 920	Leunon, John, San Francisco, Cal. Harrow.....	Jan. 1, 1878	204	58	13	40
206, 955	Same..... Wheelbarrow.....	Aug. 13, 1878	318	97	14	249
202, 179	Lennon, Sayres N., Chicago, Ill. Fence-post.....	Apr. 9, 1878	346	101	13	652
208, 743	Lenox, Edwin S. (See Smith, Moses C., assignor.)					
204, 984	Lenox, John Samuel, Gainesville, Tex. Fence.....	Oct. 8, 1878	309	89	14	537
	Lent, Benson, Peekskill, N. Y. Lock hinge.....	June 18, 1878	608	178	13	1690
	Leonard, Charles L. (See Dallason & Leonard.)					
	Leonard, Ezra A. (See Coulter, Columbus M., assignor.)					
	Leonard, George W. (See Warren, Charles T., assignor.)					
207, 747	Leonard, Harvey Reid, assignor to Abraham Rosenberg, San Francisco, Cal. Machine-gun.....	Sept. 3, 1878	165	50, 51	14	370
	Leonard, Henry S. (See Spencer, William Denison, assignor.)					
207, 605	Leonard, Hiram L., Bangor, Me. Joint for fishing-rods.....	Sept. 3, 1878	83	25	14	359
206, 587	Leonard, John E., Bay City, Mich. Lift-pump.....	July 30, 1878	1287	370	14	187
210, 780	Leonard, L., El Dorado, Kans. Candlestick.....	Dec. 10, 1878	438	122	14	890
207, 748	Leonard, Thorndike, Grafton, Mass. Vegetable-chopper.....	Sept. 3, 1878	168	51	14	370
202, 733	Le Page, William N., Boston, Mass. Pistol-holster.....	Apr. 23, 1878	956	275	13	744
199, 652	Lepley, James, Lewisburg, Pa. Farm-gate.....	Jan. 29, 1878	996	291	13	168
	Lerner, Herman, <i>et al.</i> (See König, Joseph Heinrich, assignor.)					
204, 057	Lescale, John M., Paimcourtville, La. Fire-escape.....	May 21, 1878	887	254	13	952

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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202, 354	Leshner, Samuel, assignor of one-half interest to J. M. Willson, Sharon, Pa. Lifting-jack.	Apr. 16, 1878	543	189	13	684
109, 075	Leslie, Edmund Norman, Skaneateles, N. Y. Covering the sides and roofs of buildings with slates.	Jan. 8, 1878	361	107	13	73
210, 205	Leslie, Samuel, and James A. Lyon, Independence, Iowa. Rotary churn.	Nov. 26, 1878	751	223	14	792
210, 131	Lessen, Francis T., San Francisco, Cal. Boot-jack.	Nov. 19, 1878	657	195	14	776
207, 749	Lester, Charles, New Orleans, La. Bale-tie.	Sept. 3, 1878	169	51	14	370
202, 734	Lester, Daniel B., Savannah, Ga. Funnel.	Apr. 23, 1878	956	275	13	744
199, 837	Lester, George H., Brooklyn, N. Y. Milk jar and can.	Jan. 29, 1878	1172	344	13	214
205, 879	Lester, James S., Atlanta, Ga. Farm and garden hoe.	July 9, 1878	462	132	14	71
206, 802	Lester, James S., Atlanta, Ga. Hoe.	Aug. 6, 1878	149	46	14	225
207, 046	Lester, James S., assignor of one-half interest to Stewart & Fain, Atlanta, Ga. Jack-eted can and vent for oil.	Aug. 13, 1878	403	125	14	260
207, 362	Lester, James S., assignor to J. M. Ellis, Atlanta, Ga. Fender.	Aug. 27, 1878	756	226	14	314
201, 183	Leater, John C., and Charles J. Fox, Chicago, Ill. Fire-extinguisher.	Mar. 12, 1878	365	113	13	477
204, 343	Letalle, Paul, Paris, France. Running-gear for vehicles.	May 28, 1878	1209	345	13	996
210, 791	Letord, Joseph S., Nevada, Mo. Combined fan and caster.	Dec. 10, 1878	439	122	14	890
209, 764	Letellier, John G., Chicago, Ill. Clamp for attaching scroll-saws to sewing-machines.	Nov. 12, 1878	200	77	14	720
199, 726	Leitzinger, Jacob, Hillsborough, Mo. Brake-block holder.	Jan. 29, 1878	1067	312	13	198
202, 036	Levalley, Christopher W., Saint Paul, Minn. Harvester.	Apr. 2, 1878	178	51	13	624
199, 985	Levan, John W. (See Eckert & Levan.)					
8, 185	Levens, Turner F., Cascades, Wash. Steering-propeller.	Feb. 5, 1878	94	31	13	247
200, 068	Lever, James S., Philadelphia, Pa. Book-binding.	Apr. 23, 1878	1161	333	13	769
209, 061	Same. same.	Feb. 5, 1878	177	57	13	261
203, 745	Same. Book-sewing machine.	Oct. 15, 1878	675	194	14	590
203, 843	Levery, Alexander, Bridgeport, Conn. Stench-valve for wash-basins.	May 14, 1878	547	155	13	901
206, 885	Levin, Marianne. (See Foster, Alfred F., assignor.)					
206, 886	Levin, William, New York, N. Y. Machine for painting canvas.	May 21, 1878	661	188	13	923
207, 750	Same. Manufacture of artists' canvas.	Aug. 13, 1878	248		14	241
196, 989	Same. Painters' canvas.	Aug. 13, 1878	250		14	241
	Same. Treadle.	Sept. 3, 1878	169	52	14	370
206, 254	Levis, George H., assignor to Domestic Refrigerator and Pipe Covering Company, Philadelphia, Pa. Insole for boots and shoes.	Jan. 8, 1878	281	81	13	59
204, 674	Levis, Henry, et al. (See Cann, Edward L., assignor.)					
209, 618	Levy, Adolph, Philadelphia, Pa. Gas-meter.	Oct. 8, 1878	250	71	14	530
206, 686	Levy, Samuel, et al. (See Cziner, Matjas, assignor.)					
206, 254	Lewin, George W. Ross, et al. (See Burbank, Abner, assignor.)					
204, 674	Lewin, John M., Lockport, N. Y. Bottle, jug, and jar cover.	July 23, 1878	899	256	14	135
209, 618	Lewis, Andrew, Downer's Grove, Ill. Hand-power vehicle.	June 11, 1878	257	80	13	1052
206, 337	Lewis, Benjamin B., Bristol, Conn. Clock-calendar.	Nov. 5, 1878	88	26	14	692
204, 344	Lewis, Charles J. (See Able, Adam F., assignor.)					
201, 184	Lewis, Christopher, Columbus, Ohio. Rail-joint.	July 23, 1878	1003	286	14	148
206, 337	Lewis, Daniel F. (See Fowler & Lewis.)					
204, 344	Lewis, Edward, and William A. Maloney, Oil City, Pa., assignors of one-third interest to Thomas M. King. Stand-pipe.	May 28, 1878	1210	345	13	996
201, 184	Lewis, Frank S., Brooklyn, N. Y. Fire-kindler.	Mar. 12, 1878	365	113	13	477
202, 356	Lewis, George T. (See Lewis, Robert H. and George T.)					
206, 680	Lewis, George T., Philadelphia, Pa., and William J. Menzies, St. Helen's, England; said Menzies assignor to said Lewis. Manufacture of bicarbonate of soda.	Apr. 16, 1878	545	159	13	684
209, 488	Lewis, George T., Philadelphia, Pa., and Bayre O. Bartlett, Joplin, Mo. Making lead pigment.	Aug. 6, 1878	25	7	14	210
206, 208	Lewis, George T., Philadelphia, Pa. Manufacture of alum-cake and sulphate of alumina.	Oct. 29, 1878	1133		14	662
203, 630	Lewis, Henry. (See Dusch & Lewis.)					
207, 047	Lewis, James A., New Haven, Conn. Carriage-spring.	Feb. 12, 1878	323	97	13	291
204, 158	Lewis, James H., Detroit, Mich. Harvester-rake.	May 14, 1878	423	121	13	886
207, 047	Lewis, John C., Charlottesville, Va. Nut-lock.	Aug. 13, 1878	404	126	14	260
204, 737	Lewis, John L., Pittsburg, Pa. Power-press.	May 28, 1878	1018	289	13	972
200, 315	Lewis, Moses, Utica, N. Y. Draft-equalizer.	Aug. 6, 1878	81	26	14	217
201, 114	Lewis, Nathan Childs, Brookline, Mass. Making horseshoe-nails.	Feb. 12, 1878	435	129	13	308
208, 185	Lewis, Oliver & Phillips. (See Prosser, John, assignor.)					
210, 865	Lewis, Robert H. and George T., Pittsburg, Pa. Hydraulic jack.	Mar. 12, 1878	800		13	467
201, 928	Lewis, Russell R., and Joseph H. Crumb, De Ruyter, N. Y. Apparatus for smoking meat.	Sept. 17, 1878	656	192	14	441
200, 738	Lewis, S. A. (See Dodge, Levi, assignor.)					
207, 878	Lewis, Spencer, and Frederick A. Baker, jr., Tiffin, Ohio. Flour-bolt.	Dec. 17, 1878	529	149	14	910
207, 879	Lewis, Sylvanus M. (See Biant, John, assignor.)					
203, 740	Lewis, Sylvester L., Fort Wayne, Ind. Label-holder.	Apr. 2, 1878	68	18	13	608
203, 747	Lewis, Thomas E., Vicksburg, Miss. Shoe-exhibitor.	Feb. 26, 1878	891	262	13	393
210, 865	Lewis, Thomas G., et al. (See Fletcher, Thomas, assignor.)					
207, 878	Lewis, Tristram S., Saco, Me. Ore-separator.	Sept. 10, 1878	317	96	14	392
207, 879	Same. same.	Sept. 10, 1878	318	96, 97	14	392
203, 740	Lewis, Urban J., et al. (See Underwood, Henry M., assignor.)					
203, 747	Lewis, Walter O., Brooklyn, N. Y. Telegraph-pole.	May 14, 1878	548	155	13	901
210, 617	Same. Electro-magnetic watchman's time-check.	May 14, 1878	549	155	13	902
204, 058	Lewis, Warren J., Leominster, Mass., assignor to Vulcanite Manufacturing Company. Manufacture of buttons and other articles from vegetable ivory, &c.	Dec. 10, 1878	260		14	866
201, 804	Lewis, Willard, Walpole, Mass. Device for folding cotton batting or wadding.	May 21, 1878	888	255	13	952
200, 209	Lewis, William H., Brooklyn, assignor to E. & H. T. Anthony & Co., New York, N. Y. Stereoscope.	Mar. 26, 1878	1030	314	13	583
202, 275	Lewthwaite, George Walter, Fort Miller, assignor to Ezekiel Inman, South Argyle, N. Y. Felt washer for paper-making machines.	Feb. 12, 1878	324	97	13	291
209, 275	Ley, Henry William, London, England. Clock.	Apr. 9, 1878	443	129	13	665
202, 446	Leycester, Charles Hugh, Gwynfe, Llangadock, South Wales, Great Britain. Portable hammock and shelter-tent.	Oct. 22, 1878	907	264	14	627
206, 738	Leypoldt, Frederick C., Philadelphia, Pa. Button-hole cutter.	Apr. 16, 1878	633	185	13	696
200, 817	Leypoldt, Louis, New York, N. Y. Railway-rail.	Aug. 6, 1878	82	26	14	217
208, 405	Same. same.	Nov. 12, 1878	310	92	14	726
190, 299	Linsee, Albert, London, England. Apparatus for conveying small parcels.	Sept. 24, 1878	895	262	14	475
193, 990	Libby, Nelson F., and Pascal Hatch, Chelmsford, Mass. Pile-driver.	Jan. 15, 1878	602	176	13	109
205, 650	Liddell, Mark J., et al. (See Button, Alphonzo, assignor.)					
	Liddell, William, Sandy Hill, N. Y. Music-leaf turner.	Jan. 8, 1878	281	81	13	59
	Liddle, Robert Z. (See Shields & Liddle.)					
	Lidell, John, assignor of one-half interest to Charles A. Johnson, Rockford, Ill. Sad-iron.	July 2, 1878	202	60	11	35
	Lidgett, William. (See Campbell & Lidgett.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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204, 743	Lieb, John W., East Newark, N. J. Fastening device for traveling-bag .....	June 11, 1878	332	100	13	1062
	Liebich, Paul Wilhelm. (See Henzel & Liebich.)					
208, 106	Liegl, Georg, Stralsund, Prussia. Gas-retort furnace .....	Sept. 17, 1878	566	169	14	430
204, 985	Light, Edward B., Denver, Colo. Leather whip .....	June 18, 1878	609	178	13	1099
	Lighton, John. (See Fichter, Conrad, assignor.)					
8, 500	Lillibridge, George, Jamestown, N. Y. Canister .....	Nov. 19, 1878	717	214	14	784
190, 454	Lillie, Lewis C., Elizabeth, N. J., and S. Morris Lillie, Philadelphia, Pa. Time-lock .....	Jan. 22, 1878	764	224	13	143
	Lillie, S. Morris. (See Lillie, Lewis C. and S. Morris.)					
206, 887	Lillie, S. Morris, Philadelphia, Pa. Time-lock .....	Aug. 13, 1878	251	79	14	241
	Lillie, Van Dorn, et al. (See Boote & Hechler, assignors.)					
200, 866	Lillis, Frank C., and Lyman A. Rebasz, Lockport, N. Y. Vent-faucet .....	Mar. 5, 1878	52	18	13	423
201, 430	Lillis, Frank C., Lockport, N. Y. Lock-faucet .....	Mar. 19, 1878	643	196	13	522
	Lima, Santiago. (See De La Vega, Miguel, assignor.)					
	Lincoln, Charles T., et al. (See Parker, Lewis H., assignor.)					
	Lincoln, James D., et al. (See Pope, Frank L., assignor) .....					
207, 048	Lincoln, William O., assignor to Bridgeport Brass Company, Bridgeport, Conn. Lamp-burner .....	Aug. 13, 1878	405	126	14	260
200, 316	Lindblad, Olof, Jamestown, N. Y. Cutter-head .....	Feb. 12, 1878	435	130	13	308
209, 605	Lindermun, Ira M., Elmira, N. Y. Vehicle-spring .....	Nov. 5, 1878	173	51	14	704
8, 219	Lindemann, Otto, Edgewater, N. Y. Fountain-cup for animal-cages .....	May 7, 1878	310	89	13	863
	Lindemann, Wilhelm. (See Meth & Lindemann.)					
	Lindop, W. E., et al. (See Obernetter, Johann Baptist, assignor.)					
	Lindquist, John S. (See Hallner & Lindquist.)					
	Lindsay, Christian Garben. (See Lindsay, Robert Galbraith and Christian Garben.)					
	Lindsay, David Alphas. (See Lindsay & Miner.)					
198, 890	Lindsay, James, et al. (See Hyde, Daniel, assignor.)	Jan. 1, 1878	171	49	13	35
202, 735	Lindsay, John P., Boston, Mass. Safety-pin .....	Apr. 23, 1878	057	275	13	744
206, 803	Same. Sleeve-supporter .....	Aug. 6, 1878	149	47	14	225
210, 545	Lindsay, John P., New York, N. Y. Garment-supporter .....	Dec. 3, 1878	160	44	14	845
	Lindsay, John P., assignor of one-half interest to James E. Wildey, New York, N. Y. Cap for bottle-stopper .....	Dec. 10, 1878	440	123	14	890
210, 792	Lindsay, John P., New York, N. Y. Securing loops and studs to suspender-ends and other articles .....	Jan. 8, 1878	362	107	13	73
199, 076	Lindsay, Robert Galbraith and Christian Garben, Hollidaysburg, Pa. Construction of houses .....	Nov. 26, 1878	808	239 } 240 }	14	800
210, 262	Lindsay, Thomas Jefferson David Alphas, and William Jefferson Miner, Windfall, Ind. Combined seed-drill and corn-planter .....	Apr. 16, 1878	544	159	13	684
202, 355	Lindsay, William G., et al. (See Hyde, Daniel, assignor.)	July 2, 1878	203	61	14	35
205, 657	Lindsey, Peter H., Lockport, N. Y. Carriage-top adjuster .....	Sept. 10, 1878	319	97	14	393
207, 880	Ling, Lorenzo, Pulaski, N. Y. Plow .....	Feb. 19, 1878	732	214	13	361
8, 090	Lingen, Hermann, Wheeling, W. Va. Measuring-jacket .....					
	Link, David C., New York, N. Y. Preserving meats .....					
	Linley, Ezra H. (See Milligan, John F., assignor.)					
202, 447	Linn, Adam, administrator. (See Lippy & Linn) .....	Apr. 10, 1878	634	185	13	696
	Linn, Arthur L., Cleveland, Ohio. Burglar-alarm .....					
	Linn, Samuel. (See Lippy & Linn) .....					
202, 559	Lipe, Walter, et al. (See Bendix, George E., assignor.)	Apr. 16, 1878	761	220	13	712
209, 340	Lipman, Lewis H., Philadelphia, Pa. Pocket cigar-cutter .....	Oct. 29, 1878	990	288	14	641
210, 461	Lippe, Charles, New York, N. Y. Window-cornice .....	Dec. 3, 1878	75	-----	14	84
	Lippincott, Joseph, et al., Kilbuck Township, Allegheny County, assignor to Henry C. Van Tine, Pittsburg, and Andrew Howard, Wilkins Township, Pa. Lubricating compound .....	Jan. 15, 1878	517	152	13	97
199, 214	Lippitt, Andrew C., New London, Conn. Butter-dish .....	Nov. 19, 1878	658	195	14	776
210, 132	Lippitt, Francis J., Washington, D. C. Paper-fastener .....	Sept. 3, 1878	218	67	14	376
8, 398	Lippy, David, Mansfield, Ohio, and Adam Linn, administrator of Samuel Linn, deceased. Fruit-drying oven .....	Apr. 30, 1878	1298	377	13	792
203, 054	Lipsey, Andrew B., West Hoboken, N. J. Ore-crusher .....	Oct. 8, 1878	310	80	14	538
208, 746	Listeman, Philip, assignor to self and John W. Davis, Collinsville, Ill. Gate .....	July 9, 1878	329	95	14	54
205, 754	Little, Ezekiel C., and David H. Nation, assignors to Excelsior Manufacturing Company, Saint Louis, Mo. Stove-oven shelf .....	Feb. 26, 1878	970	285	13	405
8, 104	Little, George H., Peabody, Mass. Injector .....	Feb. 26, 1878	972	285	13	405
8, 105	Same. Same .....	Mar. 19, 1878	565	173	13	511
201, 352	Little, George H., Peabody, and James S. Smart, Salem, Mass. Valve .....	Apr. 9, 1878	346	101	13	652
202, 180	Little, Horace B., Hartford, Conn. Adjustable centering-square .....	July 23, 1878	818	234	14	124
206, 184	Little, J. Russell, Jamaica Plain, Boston, Mass. Mechanical movement .....					
	Little, Peter P. (See Hartley & Little.)					
	Little, Preston. (See Kinsey, Ernest U., assignor.)					
8, 035	Little, Samuel A., Shelburne, Mass., assignor to Yale Lock Manufacturing Company, Stamford, Conn. Time-lock .....	Jan. 8, 1878	439	128	13	84
199, 653	Littlefield, Jason E., East Thorndike, Me. Cattle-tie .....	Jan. 20, 1878	969	291	13	188
208, 248	Littlefield, Roger S., Chicago, Ill. Dam and pier .....	Sept. 24, 1878	737	215	14	454
204, 476	Littlejohn, William, Marshall, Tex. Bagasse-furnace .....	Oct. 1, 1878	23	6, 7	14	492
207, 360	Litzelle, John C., Rockford, Ill. Medicine-case .....	Aug. 27, 1878	755	225	14	314
	Livermore, C. C., et al. (See Bacon, Charles H., assignor.)					
200, 069	Livermore, Charles Edward, San Francisco, Cal. Mercury-condenser .....	Feb. 5, 1878	178	57	13	261
	Livermore, Frederick D. (See Larson & Livermore.)					
206, 568	Livermore, Joseph H., Sorrento, Italy. Wine and oil box .....	July 30, 1878	1298	370	14	187
203, 550	Livingston, Francis, Newark, N. J. Machine for sharpening pencils .....	May 14, 1878	353	100	13	877
	Livingston & Co., Weil. (See Schupp, Martin, assignor.)					
207, 361	Llewellyn, Lewis, Millwood, Va. Lubricator for vehicle-axles .....	Aug. 27, 1878	756	225	14	314
	Lloyd, David D. (See McCauley, Robert E., assignor.)					
205, 658	Lloyd, Edwin L., Philadelphia, Pa. Window-screen .....	July 2, 1878	204	61	14	25
	Lloyd, Willet. (See Gallaher, Lloyd & Walker.)					
209, 818	Lloyd, William M., New York, N. Y. Game-table .....	Nov. 12, 1878	311	93	14	726
	Lobdell Car Wheel Company. (See Denio, Asa O., assignor.)					
200, 070	Loch, Joseph, New York, N. Y. Tumbler for permutation-lock .....	Feb. 5, 1878	179	57	13	261
205, 969	Locke, Daniel, Creston, Ill. Clod-crusher .....	July 10, 1878	572	163	14	90
	Locke, Edward A. (See Buck, D. Azro A., assignor.)					
203, 471	Locke, Edward A., assignor to Benedict & Burnham Manufacturing Company, Waterbury, Conn. Globe-holder for gas-burners, &c .....	May 7, 1878	248	72	13	854
201, 026	Locke, Herbert G., Waterville, N. Y. Hop-picking machine .....	Mar. 5, 1878	206	65	13	446
207, 534	Same. Same .....	Aug. 27, 1878	940	276	14	336
8, 520	Locke, John C., Rochester, N. Y., assignor to John J. Cowell, Newark, N. J. Trunk. (Reissue) .....	Dec. 10, 1878	484	136	14	896

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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203, 168	Locke, Sylvanus D., Hoosick Falls, N. Y. Grain-binder.	Apr. 30, 1878	1417	{ 413 414 }	13	807
203, 351	Same.....Hop-picking machine.	May 7, 1878	118	35	13	836
204, 585	Same.....Change-speed gear.	June 4, 1878	157	51	13	1035
205, 108	Same.....Wire-cutter.	June 18, 1878	728	217	13	1116
207, 612	Same.....Spool and take-up for grain-binders.	Sept. 3, 1878	27	10	14	353
206, 255	Lockhart, Charles. (See Connelly, Joseph H. and Thomas E., assignors.)	July 23, 1878	900	256	14	135
209, 487	Lockhart, John, Philadelphia, Pa. Temporary binder.	Oct. 29, 1878	1132	331	14	652
203, 631	Lockhart, John, and George W. Albion, Neoga, Ill. Band-cutting fork.					
203, 631	Lockwood, Byron H. (See Schade & Lockwood.)					
203, 631	Lockwood, David C., assignor to Rubber and Celluloid Harness Trimming Company, Newark, N. J. Martingale ring.	May 14, 1878	425	122	13	886
205, 880	Same.....Strip for coating articles with celluloid and other plastic compositions.	July 9, 1878	464	132	14	71
8, 076	Lockwood, George E. (See Foster & Lockwood.)					
202, 037	Lockwood, James K., Alpena, Mich. Circular saw.	Feb. 5, 1878	237	72	13	270
204, 905	Lockwood, Rhodes, Boston, Mass. Pessary.	Apr. 2, 1878	179	52	13	624
8, 322	Same.....India-rubber surgical tube.	June 18, 1878	529	154	13	1089
207, 066	Loeb, Charles, New York, N. Y. Scarf.	July 9, 1878	532	152	14	40
207, 066	Loeb, Marcus. (See Wolf & Loeb.)					
209, 705	Loebenstein, Leon, New York, N. Y. Stocking-supporting clasp.	Sept. 3, 1878	84	25	14	359
205, 881	Lochner, August, assignor of one-half interest to John B. Reilly, Saint Louis, Mo. Shaft-coupling.	Nov. 12, 1878	260	77	14	720
205, 881	Loehr, Heinrich, New York, N. Y. Bottle-stopper fastener.	July 9, 1878	464	132	14	71
206, 117	Loewig, Friedrich, et al. (See Löwig, Carl, assignor.)					
206, 462	Loewig, Gustav, et al. (See Löwig, Carl, assignor.)					
201, 431	Loewy, Heinrich, Berlin, Germany. Hernia-truss.	July 16, 1878	728	209	14	109
205, 822	Logan, Milton, Foxburg, Pa. Car-coupling.	July 30, 1878	1156	331	14	171
208, 322	Logue, Francis M., Vicksburg, Miss. Bale-tie.	Mar. 19, 1878	643	196	13	523
208, 528	Same.....same.	July 9, 1878	465	132	14	71
210, 043	Lohmann, Albert, Iserlohn, Prussia, Germany. Sad-iron.	Sept. 24, 1878	814	237	14	464
208, 528	Lomas, John R., assignor to B. Shoninger, New Haven, Conn. Organ-pedal.	Oct. 1, 1878	73	22	14	499
210, 043	Same.....Piano-forte.	Nov. 19, 1878	562	168	14	753
201, 115	Lomax, John A., et al. (See Whitman, William G., assignor.)					
208, 249	Lomb, Henry, et al. (See Gundlach, Ernst, assignor.)					
199, 986	Lombard, Charles E., Cambridge, Mass. Needle-sharpener.	Mar. 12, 1878	302	92	13	487
199, 986	Lombard, Hezekiah, Westfield, Mass. Whip-rounding machine.	Sept. 24, 1878	738	216	14	455
199, 986	Lombard, Nathan C., Cambridgeport, assignor to Abby A. Sawyer, Boston, Mass. Aerial observatory.	Feb. 5, 1878	94	31	13	248
199, 986	Long, Alonzo Lewis and Edgar Cordenia, Big Rock, Ill. Harvester cut-off.	Jan. 29, 1878	1067	312	13	198
207, 751	Long, Edgar Cordenia. (See Long, Alonzo Lewis and Edgar Cordenia.)					
207, 751	Long, George F., et al. (See Roberts, Edward J., assignor.)					
207, 751	Long, John, Massillon, Ohio. Plow.	Sept. 3, 1878	171	52	14	371
207, 752	Same.....Plow-share or point.	Sept. 3, 1878	172	52	14	371
209, 819	Long, Louis, Evansville, Ind. Apparatus for forming horse-collars.	Nov. 12, 1878	312	93	14	726
199, 455	Long, Nathan H., assignor to self, John Marks, and Philip F. Davis, Muncie, Ind. Clothes-washer.	Jan. 22, 1878	766	224	13	143
205, 109	Long, Nathan S., Marysville, Ohio. Butter-press.	June 18, 1878	730	217	13	1116
205, 176	Longden, Charles E., New Haven, Conn. Gun-cleaner.	Oct. 22, 1878	908	264	14	627
206, 463	Loneragan, Stephen, Lewiston, Me. Square.	July 30, 1878	1157	332	14	171
202, 560	Longking, Thomas and Thomas P., Brooklyn, N. Y. Combined carriage and chair.	Apr. 16, 1878	761	220	13	712
8, 418	Longking, Thomas P. (See Longking, Thomas and Thomas P.)					
189, 838	Longnecker, Alfred P. (See McCarren, John H., assignor.)					
203, 844	Longworth, Miron V., Delphos, Ohio. Harness-pad.	Sept. 17, 1878	693	204	14	416
204, 345	Longworth, Miron V., and Eli M. Tammill, Delphos, Ohio. Combined hammer, meat-pounder, and basher.	Jan. 29, 1878	1173	344	13	215
204, 345	Longworth, Landon R., Cincinnati, Ohio. Electric candle.	May 21, 1878	662	188	13	923
204, 345	Longyear, Jacob, and Daniel W. Clark, assignors of one-third interest to Miles M. Seymour, Leslie, Mich. Wind-engine.	May 28, 1878	1212	346	13	906
209, 619	Loom Picker Company. (See Garland, James G., assignor.)					
209, 619	Same.....(See Parker, Jerome M., assignor.)					
209, 619	Loomis, Samuel L., San Jose, Cal. Bullet-machine.	Nov. 5, 1878	91	26, 27	14	693
202, 113	Lorch, Ernest P., New Bern, N. C. Apparatus for making ice.	Aug. 20, 1878	670	199	14	297
201, 539	Lord, Charles W., Newton, Mass. Mechanism for utilizing wave-power.	Apr. 9, 1878	271	80	13	642
201, 540	Lord, Simcoe, Saint Louis, Mo. Truck for street-car.	Mar. 19, 1878	722	229	13	538
189, 077	Same.....Car-truck.	Mar. 19, 1878	723	229	13	538
210, 340	Lord, Tyler C., assignor of one-half interest to F. E. March, Joliet, Ill. Horse hay-rake.	Jan. 8, 1878	362	107	13	73
201, 027	Lord, Tyler C., Joliet, Ill. Check-row attachment for corn-planters.	Nov. 26, 1878	896	263	14	811
201, 027	Loree, John, assignor of one-half interest to M. E. Jennings, Lincoln, Nebr. Obstetrical supporter.	Mar. 5, 1878	206	65	13	447
204, 586	Lorentz & Sullivan, et al. (See Conway, William B., assignor.)					
201, 619	Lorenz, Jacob, and Frederick W. Bender, Hamilton, Ohio. Refrigerator-building.	June 4, 1878	158	51, 52	13	1035
209, 062	Lorenz, John C., Saint Petersburg, Pa. Oil-well sprinkler.	Mar. 26, 1878	851	259	13	555
209, 062	Lorenz, William Karl, Toledo, Ohio. Machine for dressing and ornamenting marble, slate, &c.	Oct. 15, 1878	677	194	14	500
8, 302	Lorillard & Co., P. (See Siedler, Charles, assignor.)					
203, 282	Loring, David B. (See Wheeler & Loring.)					
203, 282	Loring, David B., Boston, Mass., assignor, by mesne assignments, to John E. Wheeler, John E. and Charles W. Russell, trustees. Machine for making horseshoe-nails. (Re-issue.)	June 25, 1878	1117	350	13	1172
203, 282	Loring, David B., Boston, Mass. Machine for making horseshoe-nails.	May 7, 1878	46	14	13	826
201, 884	Loring, Gayton P., et al. (See White, Charles W., assignor.)					
201, 884	Same.....same.					
204, 986	Loring, Harrison, Boston, Mass. Extracting oil from fish.	Apr. 2, 1878	26	7	13	602
204, 986	Lortz, Michael. (See Taylor & Lortz.)					
211, 027	Loth, Rudolph, Bridgeport, Conn. Blind-slat adjuster.	June 18, 1878	610	179	13	1100
211, 027	Lothrop, Frank. (See Clark & Lothrop.)					
211, 027	Lothrop, Thomas C. (See Dunbar & Lothrop.)					
200, 402	Lottridge, William, assignor of eight-eighths interest to Martin V. Nichols and four-eighths to Cyrus H. Coffey, Osage, Iowa. Grain-binder.	Dec. 17, 1878	727	{ 200 201 }	14	933
207, 535	Lotz, William H., Chicago, Ill. Toy money-box.	Feb. 19, 1878	532	157	13	331
208, 529	Loud, Herbert, Boston, Mass. Sheave or pulley.	Aug. 27, 1878	942	277	14	386
207, 536	Loud, Samuel C., Boston, Mass. Ship's pump.	Oct. 1, 1878	73	22	14	499
207, 536	Loudon, John R. (See Workman, Rease W., assignor.)					
207, 536	Loudon, William, Superior, Nebr. Lift-pump.	Aug. 27, 1878	943	277	14	336

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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203, 472	Loughran, Thomas, New York, N. Y. Crockery pitcher.....	May 7, 1878	249	72	13	855
208, 981	Same..... Spittoon.....	Oct. 15, 1878	579	168	14	577
206, 464	Loughridge, William, Baltimore, Md. Car-brake.....	July 30, 1878	1157	332	14	171
208, 618	Love, Edward J., assignor to self and Thomas W. Love, Rutherford, N. J. Corset-clasp.....	Oct. 1, 1878	161	47	14	511
200, 071	Love, John J., New York, N. Y. Apparatus for boring or broaching.....	Feb. 5, 1878	180	58	13	261
208, 747	Love, Samuel, Indianapolis, Ind. Potato-digger.....	Oct. 8, 1878	311	89	14	538
	Love, Thomas W. (See Love, Edward J., assignor.).....					
	Love, William. (See Tift & Love)..... (Reissue.)					
209, 696	Love, William H., assignor of one-half interest to William L. Hipkins, Washington, D. C. Automatic fan.....	Nov. 5, 1878	174	52	14	704
203, 283	Lovejoy, Daniel B., Reading, Mass. Hair-brush.....	May 7, 1878	90	15	13	827
	Lovell & Co., F. H. (See Fowler, Samuel W., assignor.).....					
210, 427	Lovell, Melvin N., assignor to F. F. Adams & Co., Erie, Pa. Mop and brush holder.....	Dec. 3, 1878	39	9	14	829
210, 428	Same..... same.....	Dec. 3, 1878	40	9	14	829
198, 749	Loverin, Nelson, Montreal, Quebec, Canada. Apparatus for teaching history, &c.....	Jan. 1, 1878	20	5	13	11
201, 257	Lovett, Arthur S., Erie, Pa. Advertising apparatus.....	Mar. 12, 1878	444	137	13	458
207, 067	Lovett, James D W., Boston, Mass., and Charles D W. Gibson, New York, N. Y. Auger-handle.....					
205, 659	Lovins, James W., and Hiram Gibson, Clintonville, Mo. Invalid-bedstead.....	Sept. 3, 1878	84	26	14	360
202, 841	Low, Alvin H., Bullion, Pa. Machine for pumping.....	July 2, 1878	205	61	14	35
	Low, Daniel, et al. (See Phillips, Phineas W., assignor)..... (Reissue.)	Apr. 23, 1878	1078	308	13	759
199, 300	Lowe, John L., Upper Alton, Ill. Grain-separator.....	Jan. 15, 1878	603	176	13	110
199, 558	Lowe, Leonard John, Ashland City, Tenn. Plow.....	Jan. 22, 1878	871	255	13	161
202, 276	Lowe, Nathaniel M., Boston, Mass. Psychrometer.....	Apr. 9, 1878	444	129	13	665
201, 353	Lowe, William, Bridgeport, Conn. Self-adjusting cut-off for engines.....	Mar. 19, 1878	506	174	13	512
210, 462	Lowell, James P., Purcellville, Va. Guano-distributor.....	Dec. 3, 1878	76	19	14	834
201, 258	Lowell, John W., Salt Lake City, Utah. Tie-rod for vehicle-axle skeins.....	Mar. 12, 1878	445	137	13	488
211, 028	Lowendahl, Marcus, et al. (See Scharfberg, Mendal, assignor.).....					
	Lowenstein, Martin, Birmingham, England. Button.....	Dec. 17, 1878	734	201	14	934
	Lowery, John, et al. (See Challinor, David, assignor.).....					
201, 028	Löwig, Carl, Breslau, Silesia, assignor to Gustav Loewig, Dresden, and Friedrich Loewig, Goldschmieden, Germany. Manufacture of caustic alkali and preparation of alumina.....	Mar. 5, 1878	207	.....	13	447
200, 739	Lowne, Robert Mann, East End, Finchley, England, assignor to Joseph Gall, New York, N. Y. Barometer.....	Feb. 26, 1878	892	262	13	393
204, 587	Lowry, John B., Springfield, Ill. Nut-lock.....	June 4, 1878	159	52	13	1035
	Lowry, M. T., et al. (See Bash, Henry R., assignor.).....					
204, 588	Loyd, John. (See Malmquist, Neil, assignor.).....					
199, 916	Loyd, William, Allegheny, Pa. Bule-tie.....	June 4, 1878	160	52	13	1035
202, 842	Lozier, Abraham W., New York, N. Y., assignor to R. G. Gnade, Rutherford Park, N. J. Sash-fastener.....	Feb. 5, 1878	31	10	13	237
202, 843	Same..... same.....	Apr. 23, 1878	1078	308	13	759
	Lucas, A. H., et al. (See Edwards & Lee, assignors.).....	Apr. 23, 1878	1080	308	13	759
203, 055	Lucas, John H., Hornellsville, N. Y. Carpet-stretcher.....	Apr. 30, 1878	1298	377	13	792
204, 059	Lucas, John J., Belleville, Ill. Fire-escape ladder.....	May 21, 1878	889	255	13	952
208, 982	Lucas, Joseph W., Leesburg, Ky. Grain-drill cleaner.....	Oct. 15, 1878	579	168	14	577
209, 409	Lucas, Simeon B., Hinsdale, N. Y. Self-locking clothes-pin.....	Oct. 29, 1878	1050	305	14	650
202, 059	Lucas, Ary, and John A. Newell, Kalamazoo, Mich. Pump.....	Apr. 23, 1878	884	254	13	735
	Luce, Curtis O. (See Jardine, John, assignor.).....					
204, 906	Luce, George D., assignor of one-half interest to O. J. Flagg, New Orleans, La. Fiber-cleaning machine.....	June 18, 1878	530	155	13	1089
	Luce, Georgiana. (See Luce, Shubael K., assignor.).....					
211, 029	Luce, James R., Stevens Point, Wis. Saw-tooth.....	Dec. 17, 1878	737	201	14	934
	Luce, Lyman, et al. (See Wade, Sedgwick M., assignor.).....					
200, 317	Luce, Shubael K., assignor to Georgiana Luce, Attleborough, Mass. Safeguard for chairs.....	Feb. 12, 1878	436	130	13	308
200, 550	Luce, Shubael K., Attleborough, Mass. Knife-scourer.....	Feb. 19, 1878	678	199	13	353
8, 338	Luchs, Asher N., et al. (See Kenney, Nicholas, assignor.).....					
	Luchs, Hannah, Washington, D. C., assignor to Daniel E. Paris, West Troy, N. Y. Fluting-machine..... (Reissue.)	July 16, 1878	786	224	14	116
	Luchs, Jacob N., et al. (See Kenney, Nicholas, assignor.).....					
205, 660	Luckenbach, Frederic A. (See De Beroise & Luckenbach.).....					
	Luckenbach, Frederic A., New York, and Abraham De Beroise, Brooklyn, assignors to John E. Mulford, New York, N. Y. Drying, curing, and renovating Indian corn and other cereal grains.....	July 2, 1878	206	62	14	35
207, 608	Luckett, Edgar M., and Nelson Belanger, Terrace, Utah. Packing valve-stems.....	Sept. 3, 1878	86	26	14	360
199, 375	Luckhurst, Walter, assignor of one-half interest to Cassimer W. Boynton, Woodbridge Township, Middlesex County, N. Y. Weeding-hoe.....	Jan. 22, 1878	688	202	13	131
	Luders, Thomas L. (See Dick, Charles J. A., assignor.).....					
208, 687	Ludlow, Henry G., Troy, and John Ward, assignors to Ludlow Valve Manufacturing Company, Lansingburg, N. Y. Slide-valve.....	Oct. 8, 1878	250	71	14	530
208, 619	Ludlow, Noah K., Mobile, Ala. Well-tubing.....	Oct. 1, 1878	163	47	14	511
204, 589	Ludlow, Samuel W., Cincinnati, Ohio. Vehicle spring and axle.....	June 4, 1878	161	52	13	1035
	Ludlow Valve Manufacturing Company. (See Ludlow & Ward, assignors.).....					
200, 318	Ludlow, Washington L., Rochester, N. Y. Knob-latch and lock.....	Feb. 12, 1878	437	130	13	308
200, 319	Same..... Lock for drawers.....	Feb. 12, 1878	439	131	13	308
198, 805	Ludlum, David Swezey, New Hampton, N. Y., and Louis Wells Ludlum, Orange, N. J. Hammer.....	Jan. 1, 1878	87	24	13	21
	Ludlum, Louis Wells. (See Ludlum, David Swezey and Louis Wells.).....					
205, 492	Lueders, Emil, West Hoboken, N. J. Coin-tester.....	July 2, 1878	29	9	14	12
204, 907	Luehrs, Michel D., Cleveland, Ohio. Screw-swaging machine.....	June 18, 1878	530	155	13	1089
205, 195	Lueken, Diedrich H., Saint Louis, Mo. Copy-book.....	June 25, 1878	835	248	13	1135
200, 551	Luetters, Carl, Solingen, Germany. Pocket-knife.....	Feb. 19, 1878	679	200	13	353
198, 770	Lufkin, Amos D., Cleveland, Ohio. Reservoir and wash-stand combined.....	Jan. 1, 1878	50	13	13	15
209, 697	Lufkin, Charles M., Alstead, N. H. Swivel-plow.....	Nov. 5, 1878	175	52	14	704
202, 844	Lufkin, Richard H., Chelsea, Mass. Leather-folding machine.....	Apr. 23, 1878	1081	309	13	709
	Lu Gar, John B. (See Murphy, Philetus L., assignor.).....					
207, 753	Lugo, Orazio, Flushing, N. Y. Electrode for electric lights.....	Sept. 3, 1878	172	53	14	371
207, 754	Same..... same.....	Sept. 3, 1878	174	53	14	371
209, 698	Same..... Process of purifying and increasing the illuminating power of gas.....	Nov. 5, 1878	176	.....	14	704
210, 793	Lubenbach, Frederic A., New York, N. Y. Apparatus and process for drying cereals.....	Dec. 10, 1878	440	123	14	890
199, 728	Lumbert, Daniel, Marston's Mills, Mass. Cranberry-picker.....	Jan. 29, 1878	1068	312	13	195
199, 078	Lumpert, Edward, New York, N. Y. Fire-escape.....	Jan. 8, 1878	364	108	13	73



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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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210, 546	Lumpkin, Thomas B., and William D. Benson, Rossville, S. C. Alarm-lock.....	Dec. 3, 1878	169	45	14	845
210, 133	Luna, James T. (See Driver, Luna, Sanders & Hill.) Lund, George, assignor to John A. Lund, London, England. Electric-clock regulator.....	Nov. 19, 1878	658	196	14	776
201, 185	Lund, John A. (See Lund, George, assignor.) Lund, John Alexander, London, England. Electro-magnetic apparatus for synchronizing clocks.....	Mar. 12, 1878	368	114	13	477
209, 820	Lunger, Augustus V., Newark, N. J. Mail-crane clamp.....	Nov. 12, 1878	312	98	14	726
204, 346	Lunger, Martin V., Philadelphia, Pa. Convertible chair.....	May 28, 1878	1212	846	13	997
203, 169	Lunger, William W., Anamosa, Iowa. Nut-lock.....	Apr. 30, 1878	1420	414	13	807
205, 110	Lunger, William W., Anamosa, assignor of one-half interest to Jay Heacock, Jones County, Iowa. Clip for neck-yokes.....	June 18, 1878	731	217	13	1116
201, 805	Lungren, Charles M., Baltimore, Md. Argand lamp-burner.....	Mar. 26, 1878	1031	315	13	583
206, 589	Lunkenheimer, Frederick, Cincinnati, Ohio. Safety-valve.....	July 30, 1878	1289	371	14	187
8, 245	Lürmann, Friedrich. (See Gröber, Carl, assignor.) Luse, Daniel and Daniel F., Centre Hall, Pa., assignors, by mesne assignments, to Hoosier Drill Company, Milton, Ind., and J. and J. A. Campbell, Harrison, Ohio. Corn-planter.....	May 21, 1878	967	276	13	962
206, 804	Luse, Daniel F. (See Luse, Daniel and Daniel F.).....					
206, 804	Luse, Dennis, Millheim, Pa. Portable jack for motive powers.....	Aug. 6, 1878	153	47	14	225
210, 794	Lusher, John, La Porte, Ind. Lawn-mower.....	Dec. 10, 1878	443	123 124	14	890
210, 044	Luther, Benjamin G., Hebronville, Mass., assignor of one-half interest to John W. Tillinghast, Providence, R. I. Folding blackboard.....	Nov. 19, 1878	563	169	14	763
211, 030	Luther, Charles A., Pawtucket, R. I., assignor to R. and H. Adams, Paterson, N. J. Machine for stretching fabrics.....	Dec. 17, 1878	737	202	14	934
208, 832	Luther, James H., Karns City, Pa. Clamp for polish-rods of oil and other wells.....	Oct. 8, 1878	403	116	14	550
209, 486	Same..... Tool for extracting obstructions from deep wells.....	Oct. 29, 1878	1131	330	14	662
8, 224	Luther, Jonathan, et al. (See Colbrook, Charles H., assignor.) Luther, Justus P. (See Elmer, William H., assignor.) Luthy, Adolph, New York, N. Y., assignor, by mesne assignments, to Karl Hutter. Bottle-stopper fastener.....	May 14, 1878	627	174	13	910
198, 771	Lüttgens, Henry A., Paterson, N. J. Whiffletree plate and clevis.....	Jan. 1, 1878	61	13	13	15
198, 804	Lüttges, Albert, Solingen, Prussia, Germany. Apparatus for hardening and tempering sheet-steel.....	Jan. 1, 1878	87	24	13	21
200, 210	Lyford, Charles W., Brooklyn, N. Y. Scarf.....	Feb. 12, 1878	325	97	13	292
206, 681	Lyman, Adelvin B., Cleveland, Ohio. Annunciator.....	Aug. 6, 1878	26	7	14	210
200, 740	Lyman, Azel Storrs, assignor to Accelerating Fire Arms Company, New York, N. Y. Accelerating-gun.....	Feb. 26, 1878	893	262	13	393
200, 464	Lyman, Fordyce A., assignor to S. H. Schmuck, Cleveland, Ohio. Gasoline-burner.....	Feb. 19, 1878	503	175	13	340
202, 736	Lynahan, Daniel. (See Koch & Lynahan.) Lynch, Charles D., Detroit, Mich. Lubricator.....	Apr. 23, 1878	958	275 276	13	744
210, 341	Lynch, John H., Baltimore, Md. Flour-sieve.....	Nov. 26, 1878	899	263	14	811
207, 971	Lynch, Webster, Union Mills, Ind. Washing-machine.....	Sept. 10, 1878	416	125	14	406
201, 806	Lynch, William, Detroit, Mich. Splint-cutting machine.....	Mar. 26, 1878	1032	315	13	583
198, 891	Lynde, John D., Philadelphia, Pa. Injector.....	Jan. 1, 1878	172	49	13	35
210, 342	Lynex, Richard, Philadelphia, Pa. Animal-trap.....	Nov. 26, 1878	899	263	14	811
206, 465	Lynn, William Henry, Freeport, Ill. Car-starter.....	July 30, 1878	1158	332	14	171
206, 500	Lynn, William Henry, and Charles Carroll Snyder, Freeport, Ill. Car-starter.....	July 30, 1878	1290	371	14	187
200, 552	Lynn, William S., Philadelphia, Pa. Bottle-register.....	Feb. 19, 1878	680	200	13	353
200, 741	Lyon, George W., Chicago, Ill. Piano-forte sound-board.....	Feb. 26, 1878	894	263	13	393
204, 495	Lyon, James A. (See Leslie & Lyon.) Lyon, John C., assignor of one-half interest to D. S. Brown, New York, N. Y. Braid-holder.....	June 4, 1878	71	25	13	1022
206, 805	Lyon, Louis H., Bridgeport, Conn. Combined ship's pump and windlass.....	Aug. 6, 1878	150	47	14	225
200, 619	Lyon, Nelson, Albany, N. Y. Boot and shoe holder.....	Feb. 26, 1878	765	225	13	374
	Lyon, Nelson. (See Leete, John W., assignor.) Same..... (See Robinson, Albert S., assignor.) Same..... (See Scopea, Edward, assignor.) Same..... (See Webster, Charles M., assignor.) Lyon, William A. (See Chittenden & Lyon.)					
206, 030	Lynona, Daniel Cornelius, Chelsea, Mass. Gage-cock.....	July 16, 1878	632	183	14	98
209, 620	Lynona, Marcus S., Armada, Mich., assignor of one-half interest to Cullen B. Clark. Fruit-drier.....	Nov. 5, 1878	92	27	14	693
200, 320	Lynona, Michael F., New York, N. Y. Fire-proof material for walls, ceilings, floors, &c.....	Feb. 12, 1878	441	181	13	309
204, 347	Same..... Bridge-tile for fire-proof buildings.....	May 28, 1878	1213	346	13	997
200, 141	Lynsaght, John. (See Nightengale, William O., assignor.) Lytle, James, Laurinburg, N. C. Cotton-seed planter.....	Feb. 12, 1878	259	78	13	281
201, 432	Lytle, Andrew J., Hillsborough, Ohio. Button-hole cutter.....	Mar. 19, 1878	644	196	13	523
200, 888	Lytle, Murdick, Oil City, Pa. Oil-well pump.....	Aug. 13, 1878	258	79	14	242
200, 956	Same..... same.....	Aug. 13, 1878	319	97	14	249
199, 839	Lytle, Robert, Pine Flats, Pa. Millstone-dressing machine.....	Jan. 29, 1878	1174	344 355	13	215
199, 840	Same..... Device for dressing millstones.....	Jan. 29, 1878	1175		13	215
205, 802	Lytle, William F. (See Finley, James R., assignor.) Lytle, William H., and Richard Crocker, Des Moines, Iowa. Machine for canceling and registering letters and postal cards.....	July 9, 1878	382	110	14	61
201, 541	Mable, Daniel K., Marshalltown, Iowa. Fence-post.....	Mar. 19, 1878	753	229	13	538
206, 591	Mable, George W., Brooklyn, N. Y. Combined watch-key and pencil-case.....	July 30, 1878	1292	371	14	188
207, 755	Mabelle, Paul F., Paris, France. Kilm for baking lime, plaster, &c.....	Sept. 3, 1878	175	53	14	371
202, 277	Macardie, George, Pittsfield, Ill., assignor of one-half interest to James P. Joy, Saint Louis, Mo. Dust-pan.....	Apr. 9, 1878	444	130	13	665
8, 366	Macarthy, Charles E., Forsyth, Ga. Horse-power.....	Aug. 13, 1878	454	139	14	296
201, 807	Same..... same.....	Mar. 26, 1878	1033	315	13	583
206, 592	Same..... same.....	July 30, 1878	1292	372	14	188
200, 699	Same..... same.....	Nov. 5, 1878	177	62	14	704
204, 906	Macarthy, John, Philadelphia, Pa. Roofing for buildings.....	Nov. 12, 1878	399	119	14	738
207, 049	MacColl, Hector, Glasgow, Scotland. Riveting-machine.....	Aug. 13, 1878	400	126	14	260
204, 060	Macdonald, Manville M., Syracuse, N. Y. Truss.....	May 21, 1878	891	255	13	952
208, 983	Macdonald, Ranald, Brooklyn, N. Y. Journal.....	Oct. 15, 1878	580	169	14	678
201, 929	Macdonald, Richard J., New York, N. Y. Carpet-lining.....	Apr. 2, 1878	69	19	13	606
206, 739	Macdonald, William R., Allegheny, Pa. Combined heater and ventilator.....	Aug. 6, 1878	83	26	14	217
206, 740	MacEwan, Edward, Maaniche, North Britain. Combined spool-holder and game device.....	Aug. 6, 1878	84	26, 27	14	217

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205, 883	Macfarlane, Isaiah G., Wilkins Township, Allegheny County, assignor to James Macfarlane, Towanda, Pa. Stove or furnace grate.....	July 9, 1878	466	133	14	71
	Macfarlane, James. (See Macfarlane, Isaiah G., assignor.)					
205, 493	Macfarlane, John Kenneth, Saint Louis, Mo. Curtain-fixture.....	July 2, 1878	80	10	14	12
209, 063	Machamer, Daniel, and John McCulloch, Lena, Ill. Feed-steamer.....	Oct. 15, 1878	677	195	14	560
	Machette, E. V., jr. (See Pearson, Robert P., assignor.)					
	Mack, Albert G. (See Young, Charles, assignor.)					
	Mack, J. C., et al. (See Seachrist, William, assignor.)					
210, 134	Mack, James C., Brooklyn, N. Y. Pump for ice and refrigerating machines.....	Nov. 19, 1878	659	196	14	777
	Mack, James T. (See Lawrence, Theodore C., assignor.)					
200, 142	Mackall, Rosalie W., Washington, D. C. Perforating-machine.....	Feb. 12, 1878	261	78	13	282
	Mackay, Frederick N. (See Siddely & Mackay.)					
	Mackay, John. (See Taylor & Mackay.)					
210, 947	Mackay, Kenneth C., Madison, Wis. Mason's pointing-tool.....	Dec. 17, 1878	634	175	14	923
209, 176	Mackay, Murdock, London, England, assignor to Henry Bash, New York, N. Y. Varnish.....	Oct. 22, 1878	813	.....	14	613
201, 808	Mackenzie, Philip W., Blauveltville, N. Y. Furnace for producing gases for heating and other purposes.....	Mar. 26, 1878	1034	316	13	583
	Mackert, John. (See Schleicher & Mackert.)					
	Mackert, Joseph. (See Schleicher & Mackert.)					
	Mackey, Daniel M. (See Ayers, Wilson D., assignor.)					
203, 056	Mackey, Jacob, assignor to self, John Mackey, William R. E. Elliott, and Henry Opperman, Steubenville, Ohio. Tuxery.....	Apr. 30, 1878	1299	377	12	792
	Mackey, John, et al. (See Mackey, Jacob, assignor.)					
201, 690	Mackey, Samuel Paxton, Brownsburg, Va. Water-wheel.....	Mar. 26, 1878	914	279	13	565
204, 590	Mackh, Charles, assignor of one-half interest to O. P. Chisholm, Elgin, Ill. Meat-roaster.....	June 4, 1878	162	53	13	1035
203, 632	Mackie, James B., New York, N. Y. Spinning-machine.....	May 14, 1878	425	122	12	886
198, 559	Mackintosh, Edward D., Brooklyn, N. Y. Top-spinning device.....	Jan. 22, 1878	872	255	13	161
208, 186	Mackrell, William J., Clinton, Mass. Dovetail-grooved bricks for plastering purposes.....	Sept. 17, 1878	657	193	14	441
203, 927	MacLean, Daniel James, Reading, Pa. Toy bank.....	May 21, 1878	747	216	13	934
201, 620	MacLennan, Roderick D., assignor of one-half interest to A. S. McDonald, Los Angeles, Cal. Sash-holder.....	Mar. 26, 1878	853	250	12	556
	Macmurdo, John R., et al. (See Tucker, Sylvester J., assignor.)					
202, 181	Macomb, John, Chicago, Ill. Ice-elevator.....	Apr. 9, 1878	347	102	13	652
	Macomber, James D. (See Jones, Macomber & McCook.)					
200, 321	Macomber, William C., Baltic, Conn. Flier for speeders and fly-frames.....	Feb. 12, 1878	442	131	13	309
209, 489	Same..... Spindle-bearing for spinning-machines.....	Oct. 29, 1878	1134	331	14	662
	Macqueen, James. (See Rushton & Macqueen.)					
205, 111	MacVicar, Malcolm, Potsdam, N. Y. Tellurian.....	June 18, 1878	731	{ 217 218 }	13	1116
202, 114	Macy, Charles R., Lamington, assignor to self, Isaac M. Holcomb, Plainfield, and John A. Thickstun, North Plainfield, N. J. Bee-hive.....	Apr. 9, 1878	273	81	13	642
202, 279	Macy, Thomas G., and Edward F. Reed, Boston, Mass. Manufacturing illuminating-gas.....	Apr. 9, 1878	446	130	13	666
210, 609	Macy, William H., assignor to John Boyle, New York, N. Y. Awning-fastening.....	Dec. 10, 1878	343	94	14	877
	Madden, Daniel, et al. (See Byrne, Joseph, assignor.)					
206, 889	Madden, Thomas, Philadelphia, Pa. Compound for marking cattle and sheep.....	Aug. 13, 1878	261	.....	14	242
203, 352	Maddell, Samuel D., Indianapolis, Ind. Harvester.....	May 7, 1878	120	35	13	836
200, 742	Maddocks, Nelson P., assignor to Charles D. Moore, Lawrence, and George B. Reed, Cambridge, said Moore assignor to George A. Durrell, Lawrence, Mass. Pie-turner.....	Feb. 26, 1878	894	203	13	393
	Mader, F. W. (See Deshon, Daniel, assignor.)					
206, 741	Madison, Pulaski T., assignor of one-half interest to George W. Tyler, Indianapolis, Ind. Rail-joint.....	Aug. 6, 1878	85	27	14	217
200, 490	Madlener, Philipp, Milwaukee, Wis. Bottle stopper and fastener.....	Oct. 29, 1878	1134	331	14	663
210, 343	Madsen, Carl Wilhelm, Chicago, Ill. Bread-cutter.....	Nov. 26, 1878	900	264	14	811
	Magee Furnace Company. (See Magee, John, assignor.) (Reissue.)					
8, 330	Magee, John, Chelsea, Mass., assignor to Magee Furnace Company. Cooking-range. (Reissue).....	July 9, 1878	541	154	14	83
203, 170	Magee, William, Fowler's, W. Va., assignor of one-half interest to David C. Pogue, Patterson's Mills, Pa. Churn.....	Apr. 30, 1878	1421	414	13	808
198, 892	Magers, James, Gervais, Oreg. Bed-bottom.....	Jan. 1, 1878	173	40	13	36
	Magill, Robert. (See Asper & Magill.)					
210, 700	Magniez, Leon, Paris, France. Shoe or garment fastening.....	Dec. 10, 1878	343	94	14	877
205, 112	Magnus, Swan, Saint Louis, Mo. Harness-saddle.....	June 18, 1878	733	218	13	1116
200, 660	Magruder, Thomas P. W., Rushville, Ill. Gate-latch.....	Feb. 26, 1878	811	239	13	381
	Maguire, Gallot & Co. (See Gallot, Julius, assignor.)					
202, 280	Maguire, James F., New York, N. Y. Tuxery.....	Apr. 9, 1878	447	131	13	666
207, 756	Maguire, Thomas, Port Jervis, N. Y. Lawn-sprinkler.....	Sept. 8, 1878	176	54	14	371
202, 660	Maguire, Thomas M., Corona, N. Y. Hydraulic-power accumulator.....	Apr. 23, 1878	885	254	13	735
	Mahan, Frank M. (See Owen & Mahan.)					
206, 339	Mahan, Isaac L., Bayfield, Wis. Heater and ventilator.....	July 23, 1878	1005	286	14	148
205, 196	Mahedy, James, Sperry, Iowa. Sled-propeller.....	June 25, 1878	836	248	13	1135
206, 238	Maher, George W., Albion, Mich. Cutting-tool.....	July 23, 1878	1004	286	14	148
210, 866	Mahle, Clemence A., Corry, Pa. Machine for boring brush-blocks.....	Dec. 17, 1878	530	150	14	910
200, 211	Mahoney, Eugene H., Boston, Mass. Folding chair.....	Feb. 12, 1878	325	98	13	282
199, 215	Mahoney, John W., Bishop Creek, Cal. Plow.....	Jan. 15, 1878	619	152	13	97
208, 250	Main, William H., Pine Meadow, Conn. Snap-hook.....	Sept. 24, 1878	738	216	14	455
8, 269	Maine, Sebeus C., Boston, Mass., assignor to New England Wardrobe Bedstead Company. Wardrobe-bedstead..... (Reissue.)	June 4, 1878	222	71	13	1044
8, 270	Same..... Cabinet-bedstead..... (Reissue.)	June 4, 1878	223	71	13	1044
203, 473	Maine, Sebeus C., assignor to Rufus H. Spaulding, Boston, Mass. Fog-signal.....	May 7, 1878	250	72	13	855
208, 251	Mains, Randolph S., New York, N. Y. Heating and cooking furniture.....	Sept. 24, 1878	739	216	14	455
204, 061	Mains, Woodbury S., Portland, Me. Hinge.....	May 21, 1878	893	256	13	953
	Maitland, Thomas. (See Riley, William P., assignor.)					
209, 277	Major, Slaughter Gabriel, Haynesville, Mo. Cow-milker.....	Oct. 22, 1878	909	265	14	627
	Makemson, Samuel C. (See Creses, Henry Daniel, assignor.)					
199, 216	Makiolczyk, Albert, New York, N. Y. Buckle for shoes, gloves, &c.....	Jan. 15, 1878	510	153	13	97
211, 031	Mallett, Francis W., assignor to Alfred H. and Herbert L. Andrews, and Thomas S. Hayden, Chicago, Ill. Annunciator.....	Dec. 17, 1878	739	202	14	935
	Mallon, Arthur. (See Schwartz, William C., assignor.)					
206, 185	Mallon, James, Baton Rouge, La. Cultivator.....	July 23, 1878	819	234	14	125
206, 503	Mallory, Amos, Mystic Bridge, Conn. Commode.....	July 30, 1878	1203	372	14	188
200, 465	Mallory, Charles Martin, assignor to Mathias Orndorff, Waukeon, Ohio. Hay-elevator. Mallory & Sanford American and Foreign Flax and Hemp Dressing Machine Company. (See Sanford, Gelston, assignor.)	Feb. 19, 1878	594	175	13	341

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190, 841	Mallory, Wheeler & Co. (See Dickerman, Amos, assignor.)					
200, 923	Mallory, William H., assignor to American Propeller Company, Bridgeport, Conn. Spar-torpedo boat.	Jan. 29, 1878	1176	345	13	215
208, 530	Malmquist, Neil, assignor to self and John Loyd, New York, N. Y. Lift and force pump.	Mar. 5, 1878	103	35	13	431
209, 177	Maloney, James A. (See Kidwell & Maloney.)					
209, 177	Maloney, James A., Georgetown, D. C. Covering for steam-pipes, boilers, &c.	Oct. 1, 1878	74	22	14	499
206, 118	Maloney, James A., and David L. Shoemaker, Georgetown, D. C., assignors to selves and John L. Kidwell. Machine for cleaning grain.	Oct. 22, 1878	814	235	14	613
208, 913	Maloney, Martin L., assignor of one-half interest to Jackson Prouty, Washington, D. C. Paint.	July 16, 1878	729		14	109
208, 913	Maloney, William A. (See Lewis & Maloney.)					
206, 466	Malpass, George W., Philadelphia, Pa. Water-cooler.	Oct. 15, 1878	505	145	14	567
206, 466	Maltby, G. E., et al. (See Jacobson, Christian F., assignor.)					
206, 466	Maltby, Philo, Cleveland, Ohio. Revolving oven.	July 30, 1878	1159	332 333	14	171
206, 340	Man, Albon. (See Sawyer & Man.)					
200, 278	Manahan, Francis X., Utica, N. Y. Milk-cooler.	July 23, 1878	1005	287	14	148
207, 050	Manahan, William A. (See Desha & Manahan.)					
207, 050	Manard, James W., Rockford, Ill. Hose-reel.	Oct. 22, 1878	909	265	14	627
204, 744	Mancourt, John W. (See Doremus, Willard D., assignor.)					
209, 821	Mandeville, James D. and William E., Caroline, N. Y. Fence.	Aug. 13, 1878	407	126	14	260
199, 079	Mandeville, James H., et al. (See Green, John W., assignor.)					
201, 186	Mandeville, William E. (See Mandeville, James D. and William E.)					
210, 206	Mandeville, William E., Ontario, Canada. Vehicle-pole tip.	June 11, 1878	333	101	13	1062
203, 171	Mandeville, William E., New Haven, Conn. Revolving ore-roaster.	Nov. 12, 1878	313	93	14	726
205, 562	Mangus, Paul, New York, N. Y. Service-valve.	Jan. 8, 1878	365	108	13	73
206, 467	Manhattan Brass Company. (See White, James H., assignor.)					
206, 467	Manier, Benjamin F., Green Island, N. Y. Sleeping-car.	Mar. 12, 1878	367	114	13	477
206, 467	Manley, Edwin, Philadelphia, Pa. Traction-wheel for street-cars.	Nov. 26, 1878	752	223	14	793
206, 467	Manley, Horace A., Boston, Mass. Printing-press.	Apr. 30, 1878	1421	415	13	808
206, 467	Manley, W. S. (See Maple, Jacob C., assignor.)					
206, 467	Manley, William, Rochester, N. Y. Machine for rubbing the seams of boots and shoes.	July 2, 1878	105	30, 31	14	22
202, 357	Same..... Seam-rubbing apparatus for boots and shoes.	July 30, 1878	1161	333	14	171
202, 357	Mann, D., et al. (See Mann, James, assignor.)					
200, 742	Mann, Edgar Ebenezer, Lawrence, Mass. Dust-pan.	Apr. 16, 1878	546	159	13	684
207, 813	Mann, H. A., et al. (See Fields, Charles C., assignor.)					
208, 187	Mann, Harry C., Philadelphia, Pa. Egg-beater.	Aug. 6, 1878	86	27	14	217
201, 261	Mann, Henry A., jr., Ballston Spa, N. Y. Paper box.	Sept. 10, 1878	244	76	14	383
209, 491	Mann, Henry N., Chicago, Ill. Tobacco package receptacle.	Sept. 17, 1878	657	193	14	441
207, 613	Mann, James, assignor of one-half interest to W. A. and D. Mann, Buffalo, N. Y. Manufacturing coupling-links.	Mar. 12, 1878	449	138	13	488
204, 235	Mann, John J., Tappan, N. Y. Thill-coupling.	Oct. 29, 1878	1135	331	14	663
202, 845	Mann, M. G., et al. (See Fields, Charles C., assignor.)					
207, 972	Mann, Stephen A., Reno, Nev. Permutation-lock.	Sept. 3, 1878	29	10	14	353
207, 972	Mann, Stephen S., Baltimore, Md. Device for testing illuminating fluids.	May 28, 1878	1100	314	13	982
198, 991	Mann, W. A., et al. (See Mann, James, assignor.)					
205, 401	Mann, William, Newcastle, Pa., assignor of one-half interest to William Plant, Isaac Hill, and James Matthews. Reverberating furnace.	Apr. 23, 1878	1082	309	13	760
205, 401	Mann, William, assignor of one-half interest to William Plant, Isaac Hill, and James Matthews, Newcastle, Pa. Reverberating furnace.	Sept. 10, 1878	416	126	14	405
205, 401	Mann, William D'Alton, Mobile, Ala. Sleeping-car.	Jan. 8, 1878	283	82, 83	13	59
205, 280	Mannebach, Julius, New York, assignor of one-half interest to Henry C. Stone, Brooklyn, N. Y. Box-planing machine.	June 25, 1878	1052	312	13	1163
205, 280	Mannen, R. Lee, et al. (See Cooper, George B. F., assignor.)					
205, 280	Mannie, George A., assignor of one-half interest to William H. Bogart, Brooklyn, N. Y. Wooden box.	June 25, 1878	919	272	13	1146
205, 280	Manning, James. (See Haas & Manning.)					
205, 280	Manning, William H. (See Brekke, Lewis Olson, assignor.)					
205, 280	Manning, William N., Rockport, Mass. Pivot-turning attachment.	Jan. 15, 1878	520	153	13	97
205, 884	Manny, Abraham J., Saint Louis, Mo. Horse hay-rake.	July 9, 1878	407	133	14	72
205, 884	Manring, Elza, et al. (See Roberts, Edward J., assignor.)					
205, 884	Mans, Charles Talcott. (See McGinnis & Mans.)					
205, 884	Mansfield, David, et al. (See Benton, Thomas P., assignor.)					
205, 884	Mansfield, J. K., et al. (See Benton, Thomas P., assignor.)					
205, 884	Mansfield, William H., assignor to Thomas C. Van Ness and Robert N. Williams, San Francisco, Cal. Liquid-freezer.	Nov. 5, 1878	178	52	14	704
205, 884	Mansur, Arthur F. (See Freeman, Moodie R., assignor.)					
205, 884	Manton, Joseph P. (See Remington & Manton). (Reissue.)					
205, 884	Manton, Joseph P., assignor to American Ship Windlass Company, Providence, R. I. Windlass. (Reissue.)	June 25, 1878	1118	331	13	1172
205, 884	Same..... Wire-cable windlass.	May 21, 1878	664	188	13	923
205, 884	Manton, Joseph P., Providence, R. I. Steam-steering apparatus.	Oct. 8, 1878	404	117	14	551
205, 884	Manwaring, William G. (See Samuelson & Manwaring.)					
205, 884	Manz, Philip C. (See Sevey & Manz.)					
205, 884	Maple, Jacob C., Trenton, N. J., assignor to W. S. Manley. Rein-holder.	Nov. 12, 1878	261	78	14	720
205, 884	Marable, Thomas Edward, Petersburg, Va., assignor to James C. Blake and Peter T. Young. Straw-cutter. (Reissue.)	Sept. 3, 1878	215	66	14	376
205, 884	Maranville, Galusha, assignor to Edward Bowman and C. Bingham Leach, Rutland, Vt. Fastening roofing-slate.	May 7, 1878	121	35	13	836
205, 884	Maranville, Harvey, assignor to self and Samuel D. Stewart, Akron, Ohio. Postal scale and counterfeit-coin detector.	Apr. 30, 1878	1300	377	13	792
205, 884	Marble, Albert, assignor of one-half interest to Albert Cone, Tekonsha, Mich. Steam feather-renovator.	Nov. 26, 1878	810	340	14	800
205, 884	Marble, Edwin T., Worcester, Mass. Cloth-finishing machine.	June 25, 1878	920	273	13	1146
205, 884	Marble, William A., New York, N. Y., assignor to Worcester Corset Company. Combined box and vase.	Mar. 12, 1878	203	92	13	467
205, 884	Marcellus, James, Sault de St. Marie, Mich. Whistle tree-hook.	June 25, 1878	1053	312	13	1163
205, 884	March, Perrin G., et al. (See Underwood, Flavius J., assignor.)					
205, 884	Marchal, George. (See Prenot & Marchal.)					
205, 884	Marchant, Robert M., London, England. Pump and condenser for motive-power engine, &c.	Mar. 19, 1878	754	230	13	538
205, 884	Marcy, Helen M. (See Wright, George, assignor.)					

*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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203, 926	Marengo, Alexander and Joseph, assignors to selves and R. Marengo, Montreal, Quebec, Canada. Cheroot machine.....	May 21, 1878	747	215	13	934
	Marengo, Joseph. (See Marengo, Alexander and Joseph.)					
	Marengo, R. (See Marengo, Alexander and Joseph, assignors.)					
210, 948	Margeson, Harris H., East Oakland, Cal. Wagon-jack.....	Dec. 17, 1878	635	176	14	923
208, 188	Maris, Joseph G., Wyndotte, Kans. Car-coupling.....	Sept. 17, 1878	658	193	14	442
200, 924	Mark, Michael, New York, N. Y. Insect-powder blower.....	Mar. 5, 1878	104	35	13	431
204, 062	Marker, James A., Baltimore, Md. Elevator-hatchway.....	May 21, 1878	894	256	13	953
205, 885	Marker, Stephen A., Hartford, Conn. Harness-saddle.....	July 9, 1878	468	133 134	14	72
198, 948	Markham, Dewitt C., Collinsville, N. Y. Vehicle-spring equalizer.....	Jan. 8, 1878	238	68	13	52
201, 187	Markle, George B., Jeddo, Pa. Coal-breaker.....	Mar. 12, 1878	368	115	13	478
199, 391	Marks, Andrew J., Beaver, Pa. Derrick for hay-stackers.....	Jan. 15, 1878	604	176	13	110
205, 114	Marks, George M., Port Matilda, Pa. Hame-fastener.....	June 18, 1878	735	218	13	1117
	Marks, Jacob F. (See Warner, Charles W., assignor.)					
	Marks, John, et al. (See Long, Nathan H., assignor.)					
199, 654	Marks, Louis, San Francisco, Cal. Compound for producing illuminating-gas.....	Jan. 29, 1878	1000		13	188
205, 282	Marland, Obadiah, Boston, Mass. Apparatus for combustion of fuel for generation of steam.....	June 25, 1878	921	273 274 275	13	1146
200, 621	Marple, Christian S., Chicago, Ill. Manufacturer of flour.....	Feb. 26, 1878	766	225	13	875
208, 531	Marqua, Philip, Cincinnati, Ohio, assignor to P. J. Marqua's Sons. Hobby-horse.....	Oct. 1, 1878	75	22	14	499
	Marqua's Sons, P. J. (See Marqua, Philip, assignor.)					
	Marquardt, J. Philip, jr. (See Getzendanner & Marquardt.)					
204, 477	Marquardt, J. Philip, jr., and William H. Getzendanner, Dayton, Ohio. Apparatus for suspending harness.....	Oct. 1, 1878	24	7	14	492
	Marquis, John, et al. (See Cummings, Samuel M., assignor.) (Reissue.)					
210, 344	Marquis, Joseph E., Sharon, Ohio. Churn.....	Nov. 26, 1878	901	264	14	811
201, 543	Marquis, Robert, Kokomo, Ind. Ear-corn-elevator feeder.....	Mar. 19, 1878	757	230	13	538
201, 433	Marr, Augustus D., Boston, Mass. Shirt.....	Mar. 19, 1878	645	197	13	523
	Marrin, Joseph J. (See Byrne, Richard, assignor.)					
209, 279	Marsden, Mark W., Connellsville, Pa. Paint-brush bridle.....	Oct. 22, 1878	910	265	14	627
198, 849	Marsden, Samuel L., assignor to Blake Crusher Company, New Haven, Conn. Stone-breaker.....	Jan. 1, 1878	127	36	13	28
	Marsh, C. W., et al. (See Whitney, Charles, assignor.)					
210, 463	Marsh, Calvin D., Williamsport, Pa. Whiffletree.....	Dec. 3, 1878	77	19	14	834
	Marsh, Charles W., et al. (See Marsh & Bergqvist, assignors.)					
	Marsh, Dexter H., et al. (See Grover & Beach, assignors.)					
	Marsh, Ellen. (See Marsh, Henry T., assignor.)					
209, 064	Marsh, Elon A., Battle Creek, Mich. Lathe for turning regular forms.....	Oct. 15, 1878	678	195	14	590
	Marsh, F. E. (See Lord, Tyler C., assignor.)					
	Marsh, Griggs. (See Marsh, Isaac and Griggs.)					
211, 032	Marsh, Henry F., New York, N. Y. Frame for drying curtains.....	Dec. 17, 1878	741	203	14	935
202, 038	Marsh, Henry T., assignor, by mesne assignments, to Ellen Marsh, Hartford, Conn. Corset.....	Apr. 2, 1878	180	52	13	624
199, 080	Marsh, Isaac, Milton, and Griggs Marsh, Lewisburg, Pa. Pottery-kiln.....	Jan. 8, 1878	366	108	13	74
	Marsh, James A. (See Bovey, George C., assignor.)					
210, 949	Marsh, James S., Lewisburg, Pa. Grain-binder.....	Dec. 17, 1878	635	176	14	923
203, 474	Marsh, John F., assignor to Springfield Glazed Paper Company, Springfield, Mass. Manufacturer of ornamental paper.....	May 7, 1878	251	72	13	855
	Marsh, W. W., et al. (See Whitney, Charles, assignor.)					
208, 022	Marsh, William W., and Charles Bergqvist, assignors to said Marsh, Charles W. Marsh, and Arthur M. Stark, Sycamore, and Charles W. Mosher, Chicago, Ill. Wire-tightener.....	Sept. 17, 1878	484	145	14	419
210, 867	Marsh, William W., Sycamore, Ill. Sulky-plow.....	Dec. 17, 1878	532	150 151	14	910
198, 772	Marsh, William Z., Brooks, Iowa. Weather-board gage.....	Jan. 1, 1878	52	14	13	16
	Marshall, Alfred A. (See Simonds & Marshall.)					
200, 143	Marshall, Edwin L., Cleveland, Ohio. Thill-coupling.....	Feb. 12, 1878	262	78	13	282
204, 441	Same..... Package for fruit, &c.....	June 4, 1878	27	9	13	1016
210, 135	Marshall, George, Thomas Ibbotson, and John Bailey, Belleville, Ill. Sectional steam-generator.....	Nov. 19, 1878	663	197	14	777
207, 428	Marshall, George E., Turner's Falls, Mass. Treating wood to imitate manila-paper pulp.....	Aug. 27, 1878	824		14	322
202, 561	Marshall, John, Pittsburg, Pa. Safety-check for elevators.....	Apr. 16, 1878	762	220	13	712
210, 701	Marshall, Justice W., Cazenovia, N. Y. Wheelbarrow.....	Dec. 10, 1878	344	94	14	877
208, 189	Marshall, Oscar, Stockton, Cal. Unloading-net.....	Sept. 17, 1878	658	193	14	442
207, 363	Marshall, Ralph W., Joliet, Ill. Wagon-jack.....	Aug. 27, 1878	757	226	14	314
	Marshall, Robert. (See Johnston & Marshall.)					
207, 291	Marshall, Robert, Pittsburg, Pa. Elevator-brake.....	Aug. 20, 1878	671	199	14	297
	Marshall, William S. (See Harrison, John D.) (Reissue.)					
196, 917	Marshall, William V., Janesville, Wis. Rule for making straight and circular lines.....	Feb. 5, 1878	32	10	13	237
209, 492	Marshman, Newman R., New York, N. Y., and Mason J. Matthews, Boston, Mass. Mechanical musical instrument.....	Oct. 29, 1878	1136	332	14	663
202, 737	Marsters, Enoch J., Stockton, and Robert A. Fisher, Sacramento, Cal.; said Fisher assignor to said Marsters. Car-truck.....	Apr. 23, 1878	961	276	13	744
	Marston, Frank W. (See Jones & Marston.)					
	Same..... (See Owens & Marston.)					
209, 127	Marston, Frank W., assignor to Owen Jones, Philadelphia, Pa. Cartridge.....	Oct. 22, 1878	762	221	14	607
205, 403	Marten, Frederick, Sodas, N. Y. Sash-fastener.....	June 25, 1878	1053	312	13	1163
210, 204	Martens, Charles, and Frank Krupp, New Orleans, La. Passenger step-register.....	Nov. 26, 1878	811	240	14	800
200, 836	Martens, Wilhelm Ludwig Ferdinand, College Point, N. Y. Centering device for surveyor's transits.....	Mar. 5, 1878	23	8	13	418
204, 745	Martin, Andrew D., Abbeville, La. Evaporating-pan.....	June 11, 1878	334	101	13	1062
208, 107	Same..... Horse-collar.....	Sept. 17, 1878	567	170	14	430
201, 029	Martin, Andrew J., assignor to P. P. Mast & Co., Springfield, Ohio. Force-feed for grain-drills.....	Mar. 5, 1878	209	66	13	447
201, 931	Martin, Daniel, Hotchkissville, Conn. Pocket-knife for opening cans.....	Apr. 2, 1878	70	19	13	609
207, 188	Martin, Elie, Paris, France. Automatic swimming-toy.....	Aug. 20, 1878	563	169	14	283
202, 448	Martin, Elisha J., Rockville, Conn. Spindle for cleaning and smoothing silk and other threads.....	Apr. 16, 1878	635	185	13	697
204, 236	Martin, Freeman Ross, Brooklyn, Wis. Iron fence.....	May 28, 1878	1102	315	13	982
202, 562	Martin, Gaylord, Milwaukee, Wis. Fire-escape.....	Apr. 16, 1878	763	220	13	712
	Martin, George F. (See Patterson, John, assignor.)					
203, 748	Martin, Henry, New York, N. Y. Attachment to bottling-machines.....	May 14, 1878	551	156	13	902

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204, 350	Martin, Henry, New York, N. Y. Bottle-stopper	May 28, 1878	1217	847	13	997
206, 341	Same. Bottle-stopper fastener	July 23, 1878	1007	287	14	148
206, 808	Martin, Jacob, Canton, Mo. Plow	Aug. 6, 1878	151	48	14	225
210, 705	Martin, Jacob, Cairo, Ill. Boot-jack	Dec. 10, 1878	444	124	14	890
203, 354	Martin, James, assignor of one-half interest to J. Perrin Johnson, Peoria, Ill. Fastening for horse-collars	May 7, 1878	122	36	13	887
207, 881	Martin, James H. C. Thornleigh, Upper Clapton, England. Rice-cleaning apparatus	Sept. 10, 1878	320	97, 98	14	393
209, 410	Martin, John B., and William T. Carothers, Clarence, Mo. Hay-loader	Oct. 29, 1878	1051	306	14	650
207, 364	Martin, John C., Richmond, Great Britain. Manufacture of white lead	Aug. 27, 1878	758		14	314
204, 348	Martin, John F., Chicago, Ill., assignor to William B. Price, Baltimore, Md. Composition for artificial marble	May 28, 1878	1215		13	997
206, 594	Martin, John H., Columbus, Ohio. Harness-tree	July 30, 1878	1294	872	14	188
207, 973	Same. Harness-saddle hook	Sept. 10, 1878	417	126	14	405
208, 408	Same. Same	Sept. 24, 1878	896	202	14	475
201, 830	Martin, John Henderson, Hartford, N. Y. Convertible chair	Apr. 2, 1878	69	19	13	609
203, 970	Martin, Joseph T., Newark, N. J. Apparatus for cutting ice	July 16, 1878	573	164	14	90
203, 172	Martin, Louis, Lyons, N. Y. Machine for exterminating noxious grasses	Apr. 30, 1878	1422	415	13	808
200, 186	Martin, Moritz, Bitterfeld, Prussia. Flour-bolting machine	July 23, 1878	820	234	14	125
211, 033	Same. Millstone-exhaust apparatus	Dec. 17, 1878	742	203	14	935
209, 347	Martin, Orin, Bloomfield, Iowa. Apparatus for boring and drilling wells	Oct. 29, 1878	990	238	14	641
199, 456	Martin, Pearl, Medford, Mass. Oil-stove	Jan. 22, 1878	767	{ 224 } 225	13	144
204, 349	Martin, Pearl, Medford, assignor of one-fourth interest to Selwyn Z. Bowman, Somerville, Mass. Stove for burning crude hydrocarbon and other oils	May 28, 1878	1215	847	13	997
205, 113	Same. Oil-stove	June 18, 1878	784	218	13	1116
208, 108	Same. Same	Sept. 17, 1878	567	170	14	430
210, 868	Martin, Philip Richard. (See Smith, Matson & Martin.)					
209, 822	Martin, Richard, Brooklyn, N. Y. Steam packing	Dec. 17, 1878	534	151	14	910
207, 189	Martin, Samuel G., South Amboy, N. J. Steam steering apparatus	Nov. 12, 1878	314	94	14	727
	Martin, Samuel Webb, assignor to Phineas P. Mast, Springfield, Ohio. Wind-wheel	Aug. 20, 1878	564	{ 160 } 170	14	284
210, 950	Martin, Therasa. (See Dimelow, John, assignor.)					
200, 743	Martin, Thomas E., San José, Cal. Windmill	Dec. 17, 1878	638	170	14	923
273, 173	Martin, William, Jr., David R. Dawson, and Robert Orchar, Dundee, North Britain. Sewing-machine	Aug. 6, 1878	87	27, 28	14	217
208, 620	Martin, William J., assignor to John Brady, Philadelphia, Pa. Feeding mechanism for button-hole sewing-machines	Aug. 30, 1878	1424	416	13	808
209, 973	Martins, Francisco José, Para, Brazil. Automatic pendulum-regulator	Oct. 1, 1878	163	48	14	511
207, 814	Martischang, Michel, Denmark Township, Lee County, Iowa. Corn-planter	Nov. 19, 1878	489	149	14	753
204, 063	Marty, John M., Faribault, Minn. Wrench	Sept. 10, 1878	245	77	14	383
	Marvil, Joshua H., Laurel, Del. Watchman's time-detector	May 21, 1878	896	256	13	953
206, 397	Marx, Felix. (See Hubmann, Gustave, assignor.)					
203, 355	Marx, Marcus, New York, N. Y. Life-preserver	July 30, 1878	1086	311	14	162
	Maschmeyer, Charles. (See Winter, John, assignor.)					
202, 546	Mase, Willard H., and Silas Terwilliger, Mattoon, N. Y. Fulling-mill	May 7, 1878	123	36	13	837
201, 030	Mason, Amasa. (See Hart, George E., assignor.)					
	Same. (See Pearson, Francis W., assignor.)					
	Mason, Edward R., Des Moines, Iowa. Thill-coupling	Apr. 23, 1878	1083	309	13	700
	Mason, Frank E., Cambridge, assignor to F. W. McCleave, Somerville, Mass. Chart for key-board musical instruments	Mar. 5, 1878	211	66	13	447
210, 619	Mason, H. H. (See Emerson, Richard, assignor.)					
	Mason & Hamlin Organ Company. (See Trowbridge, William O., assignor.)					
209, 494	Mason, James, Eynsham Hall, near Witney, England. Treating burnt pyrites	Dec. 10, 1878	261		14	867
204, 351	Mason, John Thomas. (See Beeman & Mason.)					
	Mason, Joshua, Paterson, N. J. Ironing-machine	Oct. 29, 1878	1138	352	14	603
207, 429	Mason, Lowell C., Providence, R. I. Valve-gear for engines	May 28, 1878	1218	347	13	997
	Mason, Octavius C. (See Quimby, Enoch R., assignor.)					
	Mason, Thomas, Islington, Great Britain. Machine for dressing printing-types	Aug. 27, 1878	825	244	14	322
	Massachusetts Arms Company. (See Hadley, George W., assignor.)					
200, 682	Massey, James. (See Woelfel & Massey.)					
204, 987	Massey, John E., Clerkenwell, England. Ships' log	Aug. 6, 1878	28	8	14	210
	Massey, Thomas, and William H. Rowe, Pawtucket, R. I. Bottle-stopper	June 18, 1878	611	179	13	1100
	Mast & Co., P. P. (See Martin, Andrew J., assignor.)					
	Same. (See Mast & Gardiner, assignors.)					
205, 971	Mast, Phineas P. (See Martin, Samuel Webb, assignor.)					
208, 834	Mast, Phineas P., and Charles O. Gardiner, Springfield, Ohio. Grain drilling and seed-ing machine	July 16, 1878	573	{ 164 } 165	14	90
	Mast, Phineas P., and Charles O. Gardiner, assignors to P. P. Mast & Co., Springfield, Ohio. Grain-drill feed	Oct. 8, 1878	407	{ 117 } 118	14	551
206, 807	Mast, William G. (See Dodge & Mast.)					
	Masterman, George, assignor of one-half interest to Martin Barnhart, Mishawaka, Ind. Grinding-mill for feed	Aug. 6, 1878	152	48	14	225
208, 621	Masters, William, Martinsburg, Pa. Plow-clevis	Oct. 1, 1878	165	48	14	511
202, 563	Masterson, Carson A., Decatur, Ill. Hoe and brier-hook	Apr. 16, 1878	704	221	13	712
209, 907	Masterson, Levi J., Philadelphia, Pa. Shuttle-box motion for looms	Nov. 12, 1878	400	120	14	738
207, 190	Masury, John W., New York, N. Y. Can or package for paints	Aug. 20, 1878	500	170	14	284
207, 191	Same. Can	Aug. 20, 1878	507	170	14	284
198, 893	Mathais, Louis, Toledo, Ohio. Pedal attachment for pianos	Jan. 1, 1878	174	50	13	36
199, 500	Matheny, Chelton, Winterville, Ind. Window-screen	Jan. 22, 1878	873	255	13	161
200, 187	Mather, Edmund, Harrisburg, Pa. Paper-pulp screen or dresser	July 23, 1878	821	234	14	125
200, 031	Mather, Emmett, and George R. Gleason, assignors to Wilson Packing Company, Chicago, Ill. Machine for forming tin-can bodies	July 16, 1878	633	{ 183 } 184	14	98
199, 218	Mather, John Hubbard, Chicago, Ill. Eyeglass for watch-makers	Jan. 15, 1878	521	153	13	97
198, 850	Mather, Thomas W., assignor, by mesne assignments, to Automatic Boiler and Engine Company, New Haven, Conn. Steam-boiler feeder	Jan. 1, 1878	128	37	13	28
204, 740	Mathes, William McC., Bryan, Tex. Water-drawer	June 11, 1878	365	101	13	1062
	Mathews, Alfred E. (See Youngs & Mathews.)					
	Mathews, John F. (See Walker, John D., assignor.)					
	Mathews, Lawrence R. (See Junney & Mathews.)					
206, 744	Mathews, Mortimer, and Albertus L. L. Scoville, Seneca, Kans. Agricultural boiler	Aug. 6, 1878	89	28	14	218
200, 620	Mathews, Thomas F. (See Helldon & Mathews.)					
198, 773	Mathews, William B., Delta, Ala. Tether	Feb. 26, 1878	765	225	13	374
	Mathews, William L., Imlay City, Mich. Plow	Jan. 1, 1878	53	14	13	16
	Mathewson, John. (See Sweeney, Alexander, assignor.)					



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210, 951	Mathieson, Carl A., New York, N. Y. Sail-bank	Dec. 17, 1878	638	177	14	923
208, 835	Mathieu, Jean A., Bridesburg, Pa. Furnace for distilling wool and separating the products of distillation	Oct. 8, 1878	408	118 119	14	551
209, 493	Matson, Charley Christian. (See Smith, Matson & Martin.)					
210, 702	Matignoni, Benjamin, Westfield, N. Y. Carpet-fastener	Oct. 29, 1878	1137	332	14	663
	Matteson, Silas C., Campbellport, Wis. Harrow	Dec. 10, 1878	345	95	14	877
	Matthai, John C., et al. (See Knapp, George W., assignor.)					
204, 835	Matthewman, Emma, administratrix. (See Matthewman, Joseph, deceased.)					
201, 544	Matthewman, John, New Haven, Conn. Gas-burner	June 11, 1878	437	128	13	1073
	Matthewman, Joseph, deceased, by Emma Matthewman, administratrix, Brooklyn, N. Y. Insulator for telegraph-wires	Mar. 19, 1878	758	230	13	538
201, 885	Mathews, Charles, and William Holt, Chicago, Ill. Water-heater	Apr. 2, 1878	26	7	13	602
199, 061	Mathews, Elbridge G., Oakham, Mass. Combined cultivator and seed-drill	Jan. 8, 1878	366	108 109	13	74
209, 573	Mathews, Henry A., Waterbury, Conn. Turnkey or handle for stove-doors	Nov. 5, 1878	40	11	14	686
205, 404	Mathews, Jacob S. and Joseph, Athens, Tenn. Gate-latch	June 25, 1878	1054	312	13	1163
206, 342	Mathews, Jacob S., Athens, Tenn., and August Petersohn, Washington, D. C.; said Petersohn assignor to said Mathews. Sash-fastener	July 23, 1878	1008	287	14	148
207, 757	Mathews, Jacob S. and Joseph, Athens, Tenn. Straw-cutter	Sept. 3, 1878	177	54	14	371
	Mathews, James, et al. (See Mann, William, assignor.)					
	Mathews, Joseph. (See Mathews, Jacob S. and Joseph.)					
	Mathews, Mason J. (See Gower & Mathews.)					
204, 352	Mathews, Mason J., Boston, Mass. Mechanical musical instruments	May 28, 1878	1210	847	13	997
200, 495	Same. Reed-organ	Oct. 29, 1878	1141	823	14	663
201, 809	Same. Reed-organ bellows	Oct. 29, 1878	1143	333	14	664
199, 842	Matthieson, Franz O., Irvington, N. Y. Manufacturing coffee and sugar	Mar. 26, 1878	1035		13	583
8, 238	Mattocks, Thomas S., and Judson Wise, Logan, Ohio. Insole for boots and shoes	Jan. 29, 1878	1177	345	13	215
190, 843	Matton, Morris, New York, N. Y. Flexible syringe (Reissue.)	May 21, 1878	959	274	13	960
200, 128	Same. Enema-syringe	Jan. 29, 1878	1177	346	13	215
201, 545	Same. Vulcanizing rubber tubes	Oct. 22, 1878	763	221	14	607
	Maughan, George R., Philadelphia, Pa. Carriage-wheel guard	Mar. 19, 1878	758	231	13	539
207, 758	Maughlin, Rebecca A. (See Maughlin, William W., assignor.)					
199, 655	Maughlin, William W., assignor to Rebecca A. Maughlin, Baltimore, Md. Bed-bottom	Sept. 3, 1878	178	54	14	371
	Maull, Joseph P., assignor of one-half interest to Louis C. Maull, Saint Louis, Mo. Hand-binding harvester	Jan. 29, 1878	1000	291	13	188
203, 633	Maull, Louis C. (See Maull, Joseph P., assignor.)					
	Maupin, Lilbourn D., assignor of one-half interest to James R. Miles, Renick, Mo. Nut-lock	May 14, 1878	426	122	13	686
205, 405	Maurer, Daniel, Philadelphia, Pa. Insecticide compound	June 25, 1878	1055		13	1163
201, 259	Maus, Charles, Danville, Pa. Device for oiling wagon-wheels	Mar. 12, 1878	446	138	13	488
200, 925	Maua, Clement A., Nashville, Tenn. Liquid-cooler	Mar. 5, 1878	104	35	13	431
200, 322	Mausner, Paul, Oberndorf, Württemberg. Breach-loading fire-arm	Feb. 12, 1878	443	131	13	369
210, 796	Maw, Edwin, Liverpool, England. Heating and cooling apparatus	Dec. 10, 1878	444	124 125	14	891
199, 918	Maxfield, Charles P., Fairhaven, assignor to Edward T. Covell, New Bedford, Mass. Metallic can	Feb. 5, 1878	33	10	13	237
204, 747	Maxim, Hiram S., Brooklyn, N. Y. Feed-water regulator	June 11, 1878	336	101	13	1062
208, 252	Same. Electric lamp	Sept. 24, 1878	740	216 217	14	455
208, 253	Same. Regulator for electrical lamps	Sept. 24, 1878	742	217	14	455
206, 256	Maxson, Erwin Williams, West Lenox, Pa. Bed-bottom	July 23, 1878	901	257	14	135
206, 595	Maxson, John T., Ulysses, Nebr. Hog-cholera compound	July 30, 1878	1290		14	188
207, 126	Maxwell, James M., Webster, assignor of one-half interest to Michael M. Comerford, Fairmont, W. Va. Air-brake for cars	Aug. 20, 1878	502	151	14	276
	Maxwell, James R. (See Cope & Maxwell.)					
208, 023	Maxwell, John, Rochester, N. Y. Burial-casket	Sept. 17, 1878	486	145	14	419
206, 808	Maxwell, William B., Philadelphia, Pa. Carriage-bow setter	Aug. 6, 1878	153	48	14	226
208, 748	May, Daniel, Lumberton, N. C. Vehicle-wheel hub	Oct. 8, 1878	312	89	14	538
203, 058	May, Edward S., Campbelltown, N. Y. Pocket-case for pipe and tobacco	Apr. 30, 1878	1301	378	13	792
	May, Firnhaber & Co., C. W. (See Aguel, Alexandre Esprit Napoléon, assignor.)					
208, 254	May, Harvey L., Galesburg, Ill. Windmill	Sept. 24, 1878	743	217 218	14	455
201, 932	May, James, Cambridge, Mass. Gage-lathe	Apr. 2, 1878	71	10, 20	13	609
	May, Lyman A., et al. (See Collyer, Charles W., assignor.)					
	May, William L. (See Clark, John M., assignor.)					
207, 127	Maybee, Addie, assignor of one-half interest to William Duffus, Syracuse, N. Y. Plaiting machine	Aug. 20, 1878	503	151	14	276
209, 574	Maybury, Frederick M., Milwaukee, Wis. Compound for preventing incrustation in steam-boilers	Nov. 5, 1878	41		14	686
207, 051	Maybury, Joseph Thomas, New Orleans, La. Apparatus for drying meal, flour, grain, &c. Mayber Brothers & Hachnel. (See Hachnel, Frederic, assignor.)	Aug. 13, 1878	408	127	14	260
	Mayer, David, et al. (See Jingsels, August, assignor.)					
208, 100	Mayer, Moritz, assignor, by mesne assignments, to Sophie Mayer, New York, N. Y. Insole for boots and shoes	Sept. 17, 1878	659	194	14	442
	Mayer, Sophie. (See Mayer, Moritz, assignor.)					
	Mayer, Strouse & Co. (See Adler, Max, assignor.)					
210, 045	Mayes, Thomas, Albany, N. Y. Baker's oven	Nov. 19, 1878	563	169	14	763
204, 478	Maynard, Charles, Boston, Mass. Illuminated clock	Oct. 1, 1878	25	8	14	492
202, 564	Maynz, Edward, Boston, Mass. Lacing-hook	Apr. 16, 1878	764	221	13	712
	Mayo & Brother, P. H. (See Mayo & Atkinson, assignors.)					
	Same. (See Mayo, Peter H., assignor.)					
204, 159	Mayo, Israel C. (See Dowling, Thomas, assignor.)					
199, 656	Mayo, Israel C., Gloucester, Mass. Rowlock	May 28, 1878	1019	290	13	972
202, 378	Mayo, Oscar, Evanston, Ill. Treating paper to render it incombustible	Jan. 29, 1878	1002		13	188
210, 345	Mayo, Peter H., and Thomas Atkinson, assignors to P. H. Mayo & Brother, Richmond, Va. Removable cover for show-boxes	Apr. 16, 1878	546	160	13	684
	Same. Same	Nov. 26, 1878	902	264	14	812
208, 373	Mayo, Warren S., Ottawa, Ontario, Canada. Tonguing and grooving machine	Dec. 3, 1878	41	9	14	829
195, 197	Mayerhofer, Frank, Delphos, Ohio, assignor to H. P. Eysenbach. Drag-saw	Sept. 24, 1878	814	238	14	464
199, 919	McAdams, George, Winchester, Ind. Stove-pipe shelf and utensil-stand	June 25, 1878	837	248	13	1135
200, 553	McAdams, John, Brooklyn, N. Y. Paper-ruling machine	Feb. 5, 1878	84	10	13	238
206, 809	McAdams, John and William A., Brooklyn, N. Y. Paper-ruling machine	Feb. 19, 1878	681	200	13	353
	McAdams, William, et al. (See Smalstig, William C., assignor.)	Aug. 6, 1878	154	49	14	226

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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201, 810	McAdams, William A. (See McAdams, John and William A.)	Mar. 26, 1878	1035	316	13	563
211, 034	McAllister, Albert H., Cotton Plant, Miss. Machine-gun.	Dec. 17, 1878	744	204	14	935
204, 675	McAllister, James C., Philadelphia, Pa. Steam steering apparatus.	June 11, 1878	258	80, 81	13	1052
199, 657	McAlpine, James, New Haven, Conn. Breech-loading fire-arm.	Jan. 29, 1878	1002	292	13	188
200, 403	McAnespey, John, Philadelphia, Pa. Securing rotary dashers in churns.	Feb. 19, 1878	534	158	13	831
207, 882	Same. Folding stand for rotary churn.	Sept. 10, 1878	321	98	14	393
210, 952	McAnley, Milton, Foreston, Ill. Chuck.	Dec. 17, 1878	639	177	14	923
208, 324	McAuliffe, John, Jersey City, N. J. Device for indenting and heading umbrella-ribs.	Sept. 24, 1878	816	238 239	14	465
206, 468	McAuliffe, Patrick, New York, N. Y. Machine for hulling, scouring, and cleaning coffee.	July 30, 1878	1162	333	14	172
199, 844	McAulia, James D., Beaver Falls, Pa., assignor of two-thirds interest to W. S. Kernohan, Mineral Ridge, Ohio, and J. W. Forbes, Beaver Falls, Pa. Ratchet-drill.	Jan. 29, 1878	1179	346	13	215
208, 914	McAvoy, Hugh L., assignor to D. L. Bartlett and H. W. Robbins, Baltimore, Md. Fire-plate for stoves.	Oct. 15, 1878	506	146	14	568
200, 767	McBonn, Charles E., assignor of one-half interest to B. Eskridge, Folly Mills, Va. Grain-planter.	Nov. 12, 1878	262	78	14	720
199, 082	McBrayer, Austin G., and Franklin G. Thomas, Shannon, Miss. Churn.	Jan. 8, 1878	309	109	13	74
209, 824	McBride, George, jr. (See Hitchcock, Dwight, assignor.)	Nov. 12, 1878	316	94	14	727
198, 894	McBride, John, Des Moines, Iowa. Plow attachment.	Jan. 1, 1878	174	50	13	36
209, 497	McBride, Matthew, Philadelphia, Pa. Cartridge-weighing scale.	Oct. 29, 1878	1144	333	14	664
204, 160	McBryde, Daniel Sidney, Good Hope, Miss. Fish-trap.	May 28, 1878	1020	200	13	972
	McCabe, Matthew, Brooklyn, N. Y. Printer's galley.					
	McCaffrey, James M., Sherman, Tex., and James Larkin, Milwaukee, Wis. Railway-gate.					
202, 848	McCall, H. W. (See Morton, Samuel S., assignor.)	Apr. 23, 1878	1084	310	13	760
	McCallay, Daniel. (See Wilson & McCallay.)					
204, 442	McCallip, William W., Columbus, Ohio. Guide for wire-rolling machines.	June 4, 1878	28	9	13	1016
205, 198	McCalmont, John S. (See Stibley, William M., assignor.)					
	McCanles, James E. (See Wilson & McCanles.)					
208, 749	McCanless, Samuel T., Cartersville, Ga. Cotton and hay press.	June 25, 1878	837	248	13	1135
203, 356	McCauley, Robert E., assignor of one-half interest to David D. Lloyd, Apollo, Pa. Washing-machine.	Oct. 8, 1878	312	90	14	538
202, 847	McCann, James Patrick, Wesson, Miss. Combination digging implement.	May 7, 1878	124	36	13	837
201, 031	McCarren, John H., assignor to self and Alfred P. Longnecker, Cincinnati, Ohio. Egg-carrier.	Apr. 23, 1878	1084	309	13	760
202, 565	McCarroll, William, assignor of one-half interest to Andrew Young, Chicago, Ill. Fuel-box.	Mar. 5, 1878	212	66	13	447
202, 561	McCart, John G., Milford, Mass. Cigar-pipe.	Apr. 16, 1878	765	221	13	712
201, 188	McCarthy, Cornelius, Petrolia, and Charles Giles, Summit City, Pa. Oil-pump.	Feb. 26, 1878	812	239	13	381
210, 953	McCarthy, Jeremiah, Springfield, Mass., assignor to A. Diepenbrock, New York, N. Y. Candlestick.	Mar. 12, 1878	369	115	13	478
	McCarthy, John, Syracuse, N. Y. Coffin-fastener.	Dec. 17, 1878	640	177	14	923
	Same. Mop.					
205, 661	McCarty, Edward P., et al. (See Sheldon & Pope, assignors.)	July 2, 1878	208	62	14	35
202, 359	McCarty, William. (See Carrier, Baker & McCarty.)	Apr. 16, 1878	547	160	13	694
207, 052	McCarty, William F. C. (See Hadley, Amos K., assignor.)	Aug. 13, 1878	410	127	14	200
199, 302	McCaslin, John C., Shoe Heel, N. C. Turpentine-scraper.	Jan. 15, 1878	605	177	13	110
199, 845	McCaslin, James W., Vinton, Iowa. Apparatus for lowering coffins into graves.	Jan. 29, 1878	1180	346	13	215
202, 449	McCauley, Levi Gheen, West Chester, Pa. Gas-regulator for retorts.	Apr. 16, 1878	636	186	13	697
	McCeney, Henry C., Washington, D. C. Horseshoe.					
	McChesney, Reuben, Ilion, assignor of one-third interest to T. R. Davis, New York, N. Y. Scroll-sawing machine.					
201, 601	McClave, William. (See Price & McClave.)	Mar. 26, 1878	910	279	13	565
202, 849	McClave, William, Pittston, and John A. Price, Scranton, Pa. Stove-grate.	Apr. 23, 1878	1085	310	13	760
	McCleave, F. W. (See Mason, Frank E., assignor.)					
201, 260	McClelland, Thomas M., and James A. Grant, Mount Pleasant, Iowa. Shingling-bracket.	Mar. 12, 1878	447	138	13	488
202, 738	McClintic, James P., et al. (See Hansell, Jacob, assignor.)	Apr. 23, 1878	1085	310	13	760
206, 810	McClintock, Joel M., Devall's Bluff, Ark. Lifting-jack.	Mar. 12, 1878	447	138	13	488
204, 353	McClintock, Robert. (See Ferguson, James D., assignor.)	Apr. 23, 1878	1085	310	13	760
208, 750	McCloskey, John, New York, N. Y. Take-up for sewing-machine.	Aug. 6, 1878	195	49	14	226
199, 084	Same. Sewing-machine.	May 28, 1878	1020	200	13	972
199, 561	McCloud, Sidney, Columbus, Ohio. Fagot for railway-rails.	Oct. 8, 1878	313	90	14	538
204, 353	McClure, Fred. A. (See Fuller, Charles B., assignor.)	Jan. 8, 1878	371	110	13	74
208, 750	McClure, Joseph A., Moline, Ill. Steam baker and cooker.	Jan. 22, 1878	874	256	13	161
199, 084	McCollan, Dennis, San Francisco, Cal. Adjustable center-board.	June 18, 1878	611	179	13	1100
204, 988	McCollum, Andrew J., and Thomas Seely, assignors to selves and George D. Emery, Indianapolis, Ind. Saw-mill-carriage attachment.	July 2, 1878	106	31	14	22
205, 563	McCollum, James C., Los Angeles, Cal. Adjustable stiff crupper for harness.	Feb. 5, 1878	34	11	13	238
199, 920	McCollum, W. W. (See Daughtrey, William Triplett, assignor.)	Nov. 26, 1878	903	265	14	812
210, 346	McColm, Stephen, Wagoner's Ripple, Ohio. Soil-pulverizer.					
	McCombs, William G., Colerain, Ohio. Horse-power.					
	McComb, Marshall, Pittsburg, Pa. Sash-fastener.					
	Same. Coin-counter.					
208, 407	McCombs, Annie. (See McCombs, George F., assignor.)	Sept. 24, 1878	896	262 263	14	475
205, 735	McCombs, George F., assignor to Annie McCombs, Washington, Pa. Broom-sewing machine.	July 9, 1878	330	96	14	54
200, 466	McConn, William Matthew, Portland, Ore. Fein-holder.	Feb. 19, 1878	505	175	13	341
207, 574	McConnell, Alexander E., New Orleans, La. Buckle.	Sept. 10, 1878	418	126	14	405
199, 303	McConnell, Atlas F., Lewisburg, Tenn. Culinary utensil.	Jan. 15, 1878	606	177	13	110
207, 614	McConnell, Edward, assignor of one-half interest to J. M. Patterson, Lexington, Va. Nut-lock.	Sept. 3, 1878	30	10, 11	14	353
209, 622	McConnell, Hugh, Cleveland, Ohio. Wick-tube.	Feb. 26, 1878	767	226	13	375
201, 189	McConnell, John, Cleveland, Ohio. Meat-broiler.	Mar. 12, 1878	370	115	13	478
202, 708	Same. Toy pistol.	Nov. 12, 1878	263	78	14	720
193, 806	Same. Detonating toy.	Jan. 1, 1878	68	24	13	22
204, 748	McConnell, John A., and William V., Crockett, Tex. Churn.	June 11, 1878	337	102	13	1062
203, 357	McConnell, William V. (See McConnell, John A. and William V.)					
	McConnell, William V., and Charles M. Dickerson, Crockett, Tex. Fruit-picker.					
205, 283	McConoughy, Hulbert N., assignor of one-half interest to Henry M. Higgins, Douglas Township, Montgomery County, Ind. Check-roller for corn-planters.	May 7, 1878	125	37	13	837
8, 255	McConoughy, Hulbert N., assignor to James M. Hart, Austin H. Smith, and Sidney J. Bots, Grant, Iowa. Check-row corn-planter.	June 25, 1878	924	275	13	1146
	McConway, William, Pittsburg, Pa. Brake-shoe. (Reissne).	May 28, 1878	1287	367	13	1006

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199, 161	McConway, William, Pittsburg, Pa. Car-brake shoe .....	Jan. 15, 1878	467	138	13	89
200, 908	McCook, Joshua P. (See Jones, Macomber & McCook.)					
	McCook, Joshua P., Richmond, Va. Packing tobacco .....	Nov. 12, 1878	401	120	14	739
	McCool, Horace B. (See Elliott & McCool.)					
207, 292	McCool, William A., et al. (See Moltrip, James C., assignor.)					
200, 072	McCord, Robert, jr., and George W. Alexander, Vincennes, Ind. Portable derrick .....	Aug. 20, 1878	671	199	14	298
	McCord, William, Sing Sing, N. Y. Vehicle-spring .....	Feb. 5, 1878	182	58	13	261
	McCormick, C. H., et al. (See Baker, William R., assignor.)					
	Same..... (See Baker & Withington, assignors.)					
	McCormick, C. H. (See Erpelding, Lambert, assignor.)					
210, 136	McCormick, C. H., et al. (See Warner, George, assignor.) .....	(Reissue.)				
	McCormick, Francis, Philadelphia, Pa. Loom-picker check .....	Nov. 19, 1878	664	197	14	777
	McCormick, H., et al. (See McCormick & Baker, assignors.)					
203, 175	McCormick, H., et al. (See Smith, Andrew J., assignor.) .....	(Reissue.)				
	McCormick, James, Princeton, Ind. Harvester cutter-bar .....	Apr. 30, 1878	1426	416	13	809
109, 083	McCormick, John Robert, Georgetown, Tex. Gang and sulky plow .....	Jan. 8, 1878	369	109	13	74
204, 479	McCormick, Junius A., Pittsburg, Pa. Water-heater for steam-boilers .....	Oct. 1, 1878	27	110	14	492
	McCormick, L. J., et al. (See Baker, William R., assignor.)					
	Same..... (See Baker & Withington, assignors.)					
	McCormick, L. J. (See Erpelding, Lambert, assignor.)					
	McCormick, L. J., et al. (See McCormick & Baker, assignors.)					
	Same..... (See Warner, George, assignor.) .....	(Reissue.)				
200, 796	McCormick, Leander J., and William R. Baker, assignors to H. & L. J. McCormick, Chicago, Ill. Harvester-reel .....	Feb. 26, 1878	944	278	13	401
200, 144	McCormick, Mark T., Petrolia, Pa. Drop-weight for oil-wells .....	Feb. 12, 1878	262	78	13	282
	McCormick, Robert S. (See Campbell, Frank M., assignor.)					
205, 115	McCormick, Theodore A. (See Wade, Thomas I., assignor.)					
200, 348	McCoy, Robert, Newark, N. J. Bosom-board .....	June 18, 1878	735	219	13	1117
	McCoy, Robert, McCoy's Station, Ind. Harrow attachment for plows .....	Oct. 29, 1878	902	288	14	641
208, 024	McCray, Thomas H. (See Caden & McCray.)					
202, 566	McCray, Thomas H., Evansville, Ind. Saw-sharpener .....	Sept. 17, 1878	487	149	14	419
199, 846	McCrea, John, Wilmington, Del. Metal-heating furnace .....	Apr. 16, 1878	768	221	13	712
	McCroxy, Franklin M., Goshen, Ind. Bellows .....	Jan. 20, 1878	1181	346	13	216
	McCrossin, Patrick. (See Tygh, James F., assignor.)					
203, 174	McCue, John Marshall, Mount Solon, Va. Artificial ford or dam .....	Apr. 30, 1878	1425	416	13	808
201, 811	McCulley, Allison B. (See Smith & McCulley.)					
	McCulley, Franklin, McKinney, Tex. Solution for preserving meats .....	Mar. 26, 1878	1037	.....	13	584
	McCulloch, John. (See Machamer & McCulloch.)					
8, 220	McCulloch, J. W., et al. (See Kerr, Christopher C., assignor.)					
200, 743	McCullough, Jethro J., Wilmington, Del. Preparing and coating metals .....	(Reissue.)				
200, 073	McCullough, Robert G., Somerville, Ill. Tile or brick kiln .....	May 7, 1878	311	89	13	863
200, 074	McCully, Robert, Philadelphia, Pa. Car-registering apparatus .....	Feb. 26, 1878	895	263	13	393
200, 075	Same.....	Feb. 5, 1878	183	58, 59	13	261
200, 076	Same.....	Feb. 5, 1878	185	59	13	262
200, 077	Same.....	Feb. 5, 1878	186	59	13	263
200, 404	Same.....	Feb. 5, 1878	187	60	13	262
190, 847	Same..... Railway-conductor's alarm and fare-registering punch .....	Feb. 5, 1878	190	60	13	262
198, 949	Same..... Key-fastener .....	Feb. 19, 1878	534	158	13	331
209, 823	McCurdy, David, Ottawa, Ohio. Gate .....	Jan. 29, 1878	1182	347	13	216
	McCurdy, John B., Joplin, Mo. Furnace for smelting lead .....	Jan. 8, 1878	238	68	13	52
	McCurley, Alfred, Madison, Ala. Combined harrow and cultivator .....	Nov. 12, 1878	315	94	14	727
	McDaniel, D. E., et al. (See St. John, Spencer H. and Justus M., assignors.)					
	McDaniel, J. S., et al. (See St. John, Spencer H. and Justus M., assignors.)					
	McDaniel, Richard P. (See Gibson & McDaniel.)					
200, 323	McDermott, Patrick, and James P. Hyde, Tremont, N. Y. Means of preventing the siphoning of traps of water-closets .....	Feb. 12, 1878	446	132	13	309
200, 280	McDermott, William, Cleveland, Ohio. Grindstone-frame .....	Oct. 22, 1878	911	266	14	627
202, 567	McDevitt, William J., Philadelphia, Pa. Cam for knitting-machines .....	Apr. 16, 1878	768	222	13	712
	McDonald, A. J. (See Gillespie, Martin, assignor.)					
	McDonald, A. S. (See MacLennan, Rhoderick D., assignor.)					
199, 457	McDonald, Alexander E., assignor of one-half interest to John R. Sloane, Hartford, Conn. Knife scourer and polisher .....	Jan. 22, 1878	768	225	13	144
208, 026	McDonald, Alexander E., Hartford, Conn. Railway-switch .....	Sept. 17, 1878	489	146	14	419
208, 109	McDonald, Alfred, Allegheny, Pa. Shaking grate .....	Sept. 17, 1878	569	170	14	430
208, 025	McDonald, Alvin, Washington, Ill., assignor of one-half interest to George Jacquin. Coffee-roasting apparatus .....	Sept. 17, 1878	488	145	14	419
203, 634	McDonald, Hugh. (See Silvester, William, assignor.)					
200, 145	McDonald, Hugh, Allegheny, Pa. Reheating-furnace .....	May 14, 1878	427	123	13	886
200, 078	McDonald, James S., Chicago, Ill. Book of carbon-paper .....	Feb. 12, 1878	263	79	13	282
	McDonald, James W., Woburn, Mass. Machine for unhairing and scouring hides and skins .....	Feb. 5, 1878	101	60	13	262
210, 797	McDonald, James W., Woburn, assignor of one-half interest to Thomas W. Clark, Boston, and F. F. Raymond, 2d, Newton, Mass. Machine for unhairing and scouring hides and skins .....	Dec. 10, 1878	446	126	14	891
8, 280	McDonald, Joseph M., Tomlinson, Ark. Truss-bridge .....	(Reissue.)				
208, 408	McDonald, Marshall, Lexington, Va. Fishway .....	June 11, 1878	490	142	13	1080
210, 046	McDonald, Platt, Plymouth, Ind. Farm harrow .....	Sept. 24, 1878	900	263	14	476
	McDonald, Sam. (See Fudge, Holmes & McDonald.)					
209, 498	McDonald, Thomas H. (See Morey & McDonald.)					
203, 059	McDonough, James W., Chicago, Ill. Piano-stool .....	Nov. 19, 1878	564	169	14	704
	McDonough, Alexander, Chicago, Ill., assignor to David G. Ross, Toronto, Canada. Barrel-cover .....	Oct. 29, 1878	1145	333	14	664
207, 430	McDougall, William James, assignor to self and James Knoppenberger, Kendall Creek, Pa. Gearing .....	Apr. 30, 1878	1301	378	13	792
201, 262	McDowell, Abraham S., assignor of one-half interest to August Nittinger, jr. Tool for cutting rivets .....	Aug. 27, 1878	820	244	14	322
203, 635	McDowell, Thomas S., Davenport, Iowa. Paper-carrier for telegraphic stock-reporters .....	Mar. 12, 1878	450	139	13	488
203, 062	McDowell, William C., and Edmund C. Ewell, Romo, Mich. Fruit-drier .....	May 14, 1878	429	123	13	886
206, 890	McDowell, William L., Philadelphia, Pa. Hot-air register and evaporator .....	July 2, 1878	208	62	14	35
	McDowell, William M., et al. (See Frank, Silas, assignor.)	Aug. 13, 1878	261	80	14	242
209, 349	McEachern, John D., Harriston, assignor to Samuel Wallace, Seaforth, Ontario, Canada. Barrel-making machine .....					
200, 467	McEachern, John D., Galt, Ontario, Canada. Machine for cutting veneers .....	Oct. 29, 1878	993	289	14	641
		Feb. 19, 1878	590	176	13	341

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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200, 468	McEachren, John D., Galt, Ontario, Canada, assignor of one-half interest to David H. Burrell, Little Falls, N. Y. Barrel.....	Feb. 19, 1878	597	176	13	341
	McElhany, William G. (See Burns & McElhany.)					
207, 615	McElroy, William, Brooklyn, N. Y. Water-closet valve.....	Sept. 3, 1878	31	11	14	853
205, 284	McEwan, Michael J., New York, N. Y. Water-closet.....	June 25, 1878	925	275	13	1146
207, 053	McFadden, George Abraham, Jordan Station, Ky. Shirt.....	Aug. 13, 1878	410	127	14	261
	McFadyen, John. (See Walker, Alexander R., assignor.)					
208, 191	McFarland, Daniel, Boonville, Mo. Combined shirt, bosom, and collar.....	Sept. 17, 1878	660	194	14	442
201, 692	McFarland, James Maxey, Virginia City, Nev. Stamp-mill.....	Mar. 26, 1878	915	280	13	566
209, 352	McFarland, John D., Erie, assignor to Milton Stewart, Titusville, Pa. Advertising device.....	Oct. 29, 1878	997	290	14	642
	McFarland, Warren. (See Smith, Aaron W., assignor.)					
	McFeely, Thomas. (See Griceom & McFeely.)					
210, 547	McGann, Owen J., and George A. Jenks, Chicago, Ill. Automatic advertising apparatus.....	Dec. 3, 1878	170	45	14	845
203, 060	McGarrett, James Wilson, Jr., Nashua, N. H. Copy-holder.....	Apr. 30, 1878	1302	378	13	792
8, 071	McGarry, Thomas J., Cleveland, Ohio. Vessel for storing and transporting oils. (Re-issue.)	Feb. 5, 1878	232	71	13	269
207, 883	McGee, Frederick William, Rutherford, N. J. Drafting-pencil.....	Sept. 10, 1878	322	98	14	393
201, 812	McGeehon, John, Fort Wayne, Ind. Car-coupling.....	Mar. 26, 1878	1037	317	13	584
	McGeorge, Horatio D. (See Davis, Guseman & McGeorge.)					
199, 085	McGill, George W., New York, N. Y. Metallic fastening.....	Jan. 8, 1878	372	110	13	75
200, 867	Same..... Buckle.....	Mar. 5, 1878	53	19	13	423
202, 039	Same..... Suspender-buckle.....	Apr. 2, 1878	180	52	13	624
208, 836	Same..... Metallic paper-fastener.....	Oct. 8, 1878	413	119	14	552
209, 701	Same..... Buckle.....	Nov. 5, 1878	179	53	14	705
210, 048	Same..... Metallic fastener.....	Nov. 19, 1878	566	170	14	764
209, 411	McGill, John W., New York, N. Y. Pocket pencil-knife.....	Oct. 29, 1878	1052	306	14	651
203, 749	McGill, William C., Washington, assignor of one-half interest to Hiram M. Brown, Georgetown, D. C. Register.....	May 14, 1878	552	156	13	902
207, 054	McGill, William C., Washington, D. C. Ironing-table.....	Aug. 13, 1878	411	127	14	261
206, 811	McGinnis, Robert Henry, and Charles Talkott Maus, assignors of one-third interest to Frank H. Grow, Goshen, Ind. Combined fire-escape and spring-bed.....	Aug. 6, 1878	156	49	14	226
206, 119	McGinty, Edward H., and Francis Mead, Centre Junction, Iowa. Car-coupling.....	July 16, 1878	730	210	14	109
200, 554	McGlaulin, Eben W., Providence, R. I. Button.....	Feb. 19, 1878	682	200	13	354
204, 676	McGlew, Thomas, San Francisco, Cal. Machine for crushing and grinding ores.....	June 11, 1878	260	81	13	1052
200, 212	McGloghlin, William D., London, Ontario, Canada. Calendar dial for clocks and watches.....	Feb. 12, 1878	326	98	13	292
204, 460	Same..... Watch-pendant.....	Oct. 1, 1878	27	8	14	492
202, 661	McGough, Thomas F., Eau Claire, Wis. Ditching machine.....	Apr. 23, 1878	886	254 } 235 }	13	735
208, 984	McGovern, Bernard, Bridgeport, Conn. Coin-holder.....	Oct. 15, 1878	581	169	14	578
201, 117	McGovern, George W., Richmond, Va. Door-knob alarm.....	Mar. 12, 1878	304	93	13	468
206, 343	McGowan, Richard J., assignor to Egyptian Embalmer Company, New York, N. Y. Embalming composition.....	July 23, 1878	1009		14	148
	McGowan, Theo., et al. (See Winters, Joseph R., assignor.)					
205, 564	McGrath, James, et al. (See Byrne, Joseph, assignor.)					
201, 434	McGrath, Patrick C., Plattsburg, N. Y. Knife for cutter-heads.....	July 2, 1878	108	31	14	23
	McGraw, Adolphus, and John Gilbaugh, Anita, Iowa. Washing-machine.....	Mar. 19, 1878	045	107	13	523
	McGraw, P. H. (See Perrott, Francis W., assignor.) (Reissue.)					
	McGraw, Perrin H. (See Blohm, Charles A., assignor.)					
	McGregor, Archibald. (See Kenworthy & McGregor.)					
209, 129	McGregor, William, assignor to N. C. Thompson, Rockford, Ill. Plow-colter.....	Oct. 22, 1878	764	222	14	607
207, 128	McGregory, Crawford, assignor of one-half interest to John D. Crabtree, Dixon, Ill. Harvester.....	Aug. 20, 1878	504	152	14	276
204, 481	McGuigan, James, Melbourne, Victoria. Reflector for attachments to fire-arms.....	Oct. 1, 1878	28	9	14	492
199, 967	McGuire, David, New Garden, Mo. Animal-trap.....	Feb. 5, 1878	95	31	13	248
	McGuire, John T. (See Arnold & McGuire.)					
	McHenry, S. (See Ingersoll, R. H., assignor.) (Reissue.)					
206, 957	McIlroy, John V., Boston, Mass. Street-railway switch.....	Aug. 13, 1878	320	97	14	249
201, 933	McIlroy, Thomas, Jersey City, N. J. Surgical operating-table.....	Apr. 2, 1878	73	20	13	609
208, 192	McIntire, Oliver K., Springfield, Ohio. Force-pump.....	Sept. 17, 1878	660	194	14	442
204, 989	McIntosh, Alexander Gregory, Atalissa, Iowa. Grain-binder.....	June 18, 1878	612	179 } 180 }	13	1100
207, 055	McIntyre, Henry W., Towanda, Pa. Extension-table slide.....	Aug. 13, 1878	412	128	14	261
203, 928	McIntyre, James C., Fort Edward, N. Y. Machine for preparing wood-fiber for paper-pulp.....	May 21, 1878	748	216	13	935
202, 739	McIntyre, Nelson, Princeton, Wis. Lifting-jack.....	Apr. 23, 1878	966	277	13	745
	McKay, Angus, et al. (See Way, Thomas R., assignor.)					
199, 729	Same..... (See Whitney, Edwin R., assignor.)					
210, 798	McKay, Ferdinand C. D., Paterson, N. J. Curtain-fixture.....	Jan. 29, 1878	1060	313	13	198
199, 304	Same..... Station-indicator.....	Dec. 10, 1878	448	126	14	891
	McKay, Gordon, Cambridge, Mass. Jack for boots and shoes.....	Jan. 15, 1878	607	177	13	110
	McKean, William C., et al. (See Thompson, Samuel R., assignor.) (Reissue.)					
	McKee, George, et al. (See Reynolds, Harvey A., assignor.) (Reissue.)					
206, 596	McKee, H. Sellers, Pittsburg, Pa. Mold for decorating glassware.....	July 30, 1878	1296	372	14	188
202, 360	McKee, John, assignor to self, Henry M. Bickford, and Nelson H. Berry, Lawrence, Mass. Apparatus for preparing food for animals.....	Apr. 16, 1878	548	160	13	684
209, 130	McKenna, William S., Pittsburg, Pa. Annealing-furnace.....	Oct. 22, 1878	764	222	14	607
	McKenzie, Alexander. (See McKenzie, David, jr., assignor.)					
209, 281	McKenzie, David, jr., assignor to self and Alexander McKenzie, Washington, D. C. Bag-fastener and tag-holder.....	Oct. 22, 1878	911	266	14	627
210, 347	McKenzie, Hamilton W., Alliance, Ohio. Plastic lining for fire-chambers.....	Nov. 26, 1878	903		14	812
203, 284	McKenzie, Joseph C., Adrian, Mich. Brick and tile machine.....	May 7, 1878	50	15, 16	13	827
	McKey, William H. (See Henderson, William Jackson, assignor.)					
203, 929	McKibben, John, Lima, Ohio. Bridle and halter.....	May 21, 1878	749	216	13	935
207, 431	McKiernan, Clements, Cincinnati, Ohio. Bootee.....	Aug. 27, 1878	827	245	14	322
	McKim, James T. (See Jarrell, Edwin, assignor.)					
	McKimm, Edgar N. (See Holland & McKimm.)					
206, 597	McKinley, Benjamin F., Morning View, Ky. Hot-air engine.....	July 30, 1878	1297	373	14	188
209, 575	McKinney, Henry D., Janesville, Wis. Toe-weight for horses.....	Nov. 5, 1878	41	11	14	686
203, 061	McKinney, William S., Hamilton, assignor to United States Iron Company, Youngstown, Ohio. Bale-tie.....	Apr. 30, 1878	1303	378	13	793
202, 850	McKinnon, Alexander, Chicago, Ill. Folding satchel.....	Apr. 23, 1878	1086	310	13	760
207, 537	McKinnon, Kenneth, Pleasant Hill, Ala. Fence.....	Aug. 27, 1878	944	277	14	337
210, 548	McKinny, Stephen P., assignor of two-thirds interest to Joshua Dooly and James M. Bond, Barrettsville, Ga. Plow.....	Dec. 3, 1878	171	45	14	845

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dis.	Vol.	Page.
202, 450	McKittrick, Alexander H., Tiffin, Ohio, assignor of one-half interest to George Dickey. Hay elevator and unloader.	Apr. 16, 1878	637	186	13	697
	McKittrick, David F. (See Peckham & McKittrick.)					
201, 693	McKnight, John R., Chicago, Ill. Index.	Mar. 26, 1878	916	280	13	566
203, 176	McKnight, William, Brooklyn, assignor to self, Woodbury Brothers, and John H. Woodward, New York, N. Y. Breastpin.	Apr. 30, 1878	1427	416	13	809
8, 064	McLane, Hiram H. (See Morris, Robert C., assignor.)					
208, 027	McLaren, James, Albany, N. Y. Wrench. (Reissue.)	Jan. 29, 1878	1227	360	13	223
	McLaughlin, William, Banister, Va. Portable fence.	Sept. 17, 1878	490	146	14	419
201, 032	McLaughlin, William J. (See Crockett, Samuel J., assignor.)					
	McLean, Alex., assignor of two-thirds interest to I. W. G. Whitney and Benjamin Morton, Ontario, Canada. Stone preservative and renovating compound.	Mar. 5, 1878	213		13	447
	McLean, Frank J. (See Borgia, Felix J., assignor.)					
207, 192	McLean, Frank J., et al. (See Burton, George F., assignor.)					
	McLean, John D., New York, N. Y. Machine for stretching, dipping, and drying fabrics.	Aug. 20, 1878	569	171	14	284
	McLeod, Charles A. (See Bussey, Esak, assignor.)					
	McLeod, John W. (See Ross & McLeod.)					
199, 458	McLinden, John D., New York, N. Y. Ventilating-flue cap.	Jan. 22, 1878	769	225	13	144
202, 278	McMackin, Peter, Lonsdale, R. I. Dry-closet.	Apr. 9, 1878	445	130	13	665
201, 546	McMahl, John, Cincinnati, Ohio. Animal-trap.	Mar. 19, 1878	759	231	13	539
198, 774	McManus, Michael B., Titusville, Pa. Sand-pump reel.	Jan. 1, 1878	53	14	13	16
204, 591	Same. Bull-wheel for artesian wells.	June 4, 1878	162	53	13	1036
200, 079	McManus, Robert, Ansonia, Conn. Tinning and finishing sheet-copper.	Feb. 5, 1878	193		13	263
203, 062	McMaster, Henry H., Jamestown, Pa. Washing-machine.	Apr. 30, 1878	1303	379	13	793
	McMillan, George Bard. (See Vincent & McMillan.)					
204, 909	McMillan, William, West Liberty, Iowa. Fence-post.	June 18, 1878	533	155	13	1090
204, 064	McMillon, George W., Manchester, Tenn. Animal-trap.	May 21, 1878	896	256	13	953
206, 812	McMurray, John H., and Samuel E. Gross, Chicago, Ill. Pavement.	Aug. 6, 1878	157	50	14	226
209, 769	McMurray, Robert, and William H. Goods, Washington, D. C.; said Goods assignor to said McMurray. Tag-holder.	Nov. 12, 1878	263	78	14	720
199, 377	McMurtrie, Duncan, Moosic, Pa. Coal and rock drilling machine.	Jan. 22, 1878	689	202	13	131
204, 677	McNair, Jonas Benjamin, Willow Hill, Ill. Trace attachments.	June 11, 1878	261	81	13	1053
209, 282	McNair, Thomas F., Worthville, Ga. Plow.	Oct. 22, 1878	912	266	14	627
207, 669	McNair, William L., Allegheny, Pa. Puddling-furnace.	Sept. 3, 1878	86	26	14	360
199, 219	McNall, Frank Eugene, West Henrietta, N. Y. Grain-binder.	Jan. 15, 1878	521	153 154 155	13	97
210, 348	McNally, James F., Washington, D. C. Engraving-machine.	Nov. 26, 1878	905	265 266	14	812
208, 028	McNamara, Michael, Buffalo, N. Y. Fire-place stove.	Sept. 17, 1878	491	146	14	419
201, 263	McNamara, William, assignor to Jarecki, Hays & Co., Erie, Pa. Hydrant.	Mar. 12, 1878	451	139	13	489
8, 407	McNamee, Richard, Philadelphia, Pa., assignor to Allen, Lane & Scott. Machine for sizing and varnishing paper. (Reissue.)	Sept. 10, 1878	459	138	14	411
205, 663	McNary, George. (See Wright & McNary.)					
	McNary, William H., Brooklyn, assignor to John V. D. Reed, New York, N. Y. Knitting-machine.	July 2, 1878	209	62, 63	14	36
204, 354	McNeil, Elias Harvey. (See McNeil, Eugene and Elias Harvey.)					
199, 162	McNeil, Eugene and Elias Harvey, Groton, N. Y. Rotary harrow.	May 28, 1878	1221	348	13	998
201, 033	McNeil, John, Chicago, Ill. Metal barb for fences.	Jan. 15, 1878	468	138	13	89
206, 344	McNeile, Alexander, Pentonville, England. Lumber-drier.	Mar. 5, 1878	214	67	13	447
	McNeill, Thomas E., New York, N. Y. Return steam-trap.	July 23, 1878	1009	287 288	14	148
199, 921	McNett, Lyman F., New York, N. Y. Corset-clasp.	Feb. 5, 1878	35	11	13	238
202, 040	McPherrin, Robert W., Hector, Kans. Fence-post.	Apr. 2, 1878	181	53	13	624
	McPherson, A., et al. (See Sweetland, Jerome B., assignor.)					
200, 868	McPherson, Daniel, Caledonia, N. Y. Grain-binder.	Mar. 5, 1878	53	19	13	423
	McPherson, John. (See Arendell, Richard Lewis, assignor.)					
201, 694	McPike, John M., Saint Helena, Cal. Harrow attachment for plows.	Mar. 26, 1878	917	280	13	566
	McQueen, Isaac B. (See Dunn, William, assignor.) (Reissue.)					
	Same. same.					
8, 248	McTighe, Henry. (See Griswold, Charles L., assignor.)					
	McTighe, James J., Alpsville, Pa. Speaking-telephone.	May 21, 1878	971	277	13	962
	McTighe, Thomas J. (See Bingham & McTighe.)					
208, 622	McVella, Walter, Manayunk, Pa. Spinning machine for spotting and covering yarn.	Oct. 1, 1878	166	48	14	511
201, 547	McVitty, Elias C., Kenton, Ohio. Metallic fence-post.	Mar. 19, 1878	760	231	13	539
206, 958	McWane, Charles P., Wytheville, Va. Plow.	Aug. 13, 1878	321	98	14	249
205, 285	Mead, Edwin D., Shortsville, N. Y. Grain-drill.	June 25, 1878	927	275	13	1147
	Mead, Francis. (See McGinty & Mead.)					
	Mead, John H. (See Mead, John W., assignor.)					
206, 813	Mead, John W., assignor of one-half interest to John H. Mead, New York, N. Y. Packing for condenser-tube.	Aug. 6, 1878	158	50	14	226
205, 286	Mead, Romeyn, McMinnville, Tenn. Box-fastener.	June 25, 1878	929	276	13	1147
199, 163	Mead, William S., New York, N. Y. Elastic tug-holder.	Jan. 15, 1878	469	138	13	89
205, 116	Same. Hopple.	June 18, 1878	736	219	13	1117
205, 117	Same. Whiffletree-hook.	June 18, 1878	737	219	13	1117
	Meade, Charles E. (See Harris, Charles E., and Nathaniel W. Meade.)					
	Meade, Nathaniel W. (See Harris, Charles E., and Nathaniel W. Meade.)					
199, 376	Meader, George, Prairie Centre, Ill. Field corn-husker.	Jan. 22, 1878	688	202	13	131
204, 355	Meahl, Jacob, and Alois Kwozcalla, Pittsburg, Pa. Machine for chopping meat.	May 28, 1878	1222	348	13	998
8, 274	Meaker, John W., Chicago, Ill., assignor, by mesne assignments, to self, Henry B. Merrell, and Thomas Ferguson. Apparatus for holding and delivering coin. (Reissue.)	June 4, 1878	227	72	13	1044
8, 275	Same. Apparatus for holding and delivering coin. (Reissue.)	June 4, 1878	229	72	13	1044
200, 080	Meaker, John W., Chicago, Ill., assignor of two-thirds interest to Harvey B. Merrell, Morristown, N. J., and Thomas Ferguson, Detroit, Mich. Device for receiving and delivering coin and detecting counterfeit coin.	Feb. 5, 1878	193	61	13	263
201, 264	Same. Apparatus for holding and counting coin.	Mar. 12, 1878	452	139	13	489
210, 137	Mecham, Oliver Savor, Champaign, Ill. Wheel-plow.	Nov. 19, 1878	664	197	14	777
	Mechling, Isaac. (See Bowman, Jonas, assignor.)					
199, 922	Medart, Martin, Belleville, Ill. Step-ladder.	Feb. 5, 1878	36	11	13	238
199, 848	Medart, Philip, assignor of one-third interest to George W. Fisher, Saint Louis, Mo. Belt-pulley.	Jan. 29, 1878	1183	347	13	216
207, 129	Medhurst, Joseph, Galesburg, Ill. Gate.	Aug. 20, 1878	505	152	14	276
8, 256	Meech, Harrison B., Chatham Village, N. Y., assignor to Benjamin F. Brown. Manufacture of paper-pulp from wood. (Reissue.)	May 28, 1878	1289	367	13	1006
8, 257	Same. Manufacture of paper-pulp from wood. (Reissue.)	May 28, 1878	1290	367	13	1006



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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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8, 258	Meech, Harrison B., Chatham Village, N. Y., assignor to Benjamin F. Brown. Manufacture of paper-pulp from wood. (Reissue).	May 28, 1878	1290	368	13	1006
207, 193	Meech, Thomas K., Buffalo, N. Y. Seat for vehicles.	Aug. 20, 1878	570	171	14	284
207, 538	Meek, Henry D. (See Hipkins, William, assignor.)					
8, 229	Mees, Carl, and Israel A. Sherman, Louisville, Ky. Electric railway-car signal.	Aug. 27, 1878	945	277	14	337
8, 424	Mefford, David M., Toledo, Ohio. Preserving fruit. (Reissue).	May 14, 1878	621	173	13	909
206, 120	Mege, Hippolyte, Paris, France, assignor, by mesne assignments, to United States Dairy Company. Treating animal fat. (Reissue).	Sept. 24, 1878	954		14	482
198, 895	Meguire, Benjamin C., Osage, Iowa. Road-grader.	July 16, 1878	731	210	14	109
205, 287	Meharry, Alexander, La Fayette, Ind. Portable derrick.	Jan. 1, 1878	175	50	13	36
208, 532	Same. Rail-joint.	June 25, 1878	930	276	13	1147
201, 886	Mehling, John A., assignor of one-third interest to John W. Heisley, Cleveland, Ohio. Preparing, finishing, and polishing the surfaces of artificial stone.	Oct. 1, 1878	75		14	499
209, 178	Mehurin, Oscar C. (See Mehurin, Oscar F. and Oscar C.)					
209, 576	Mehurin, Oscar F. and Oscar C., Newark, Ohio. Fire-place.	Apr. 2, 1878	27	7	13	602
209, 283	Meigs, Montgomery C., Washington, D. C. Reflector for candles.	Oct. 22, 1878	815	236	14	614
	Same. Candlestick reflector.	Nov. 5, 1878	42	11	14	686
209, 284	Meikle, Thomas, Louisville, Ky. Sulky-plow.	Oct. 22, 1878	913	268	14	628
210, 047	Same. Plow-standard.	Oct. 22, 1878	914	267	14	628
209, 577	Same. Plow-colt.	Nov. 19, 1878	565	170	14	704
202, 852	Meineke, Heinrich, Hannover, Prussia, assignor to Constantine Schmidt, New York, N. Y. Calendar.	Nov. 5, 1878	43	12	14	686
204, 065	Meinhardt, John F., Brooklyn, N. Y. Curtain-cord tightener.	Apr. 23, 1878	1087	311	13	760
207, 616	Meinhold, Max, Delaware, Ohio. Preparing dough.	May 21, 1878	896		13	953
207, 759	Meinhold, Theodore, Klingenthal, Saxony, Germany. Harmonica.	Sept. 3, 1878	32	11	14	353
207, 700	Same. Accordeon.	Sept. 3, 1878	179	55	14	371
8, 148	Same. same.	Sept. 3, 1878	180	55	14	372
200, 146	Meinikheim, Bernard G., Newtown, and William D. Chase, New York, N. Y.; said Chase assignor to said Meinikheim. Basket.	Apr. 2, 1878	231	67	13	632
204, 356	Meissner, Julius, Buffalo, N. Y. Reed-organ.	Feb. 12, 1878	265	79	12	282
200, 324	Meissner, Wilhelm, New York, N. Y. Music-box.	May 28, 1878	1223	348	13	998
208, 029	Meister, Lucius, and Brünning. (See Baum, Heinrich, assignor.)					
210, 138	Mekkenney, Alendo, Middleborough, Mass. Fertilizer-distributor.	Feb. 12, 1878	447	132	13	309
8, 279	Same. Carriage for spreading manure.	Sept. 17, 1878	492	146	14	420
	Melcher, John C., O'Quinn, Tex. Table.	Nov. 19, 1878	665	198	14	777
204, 357	Melick, James H., Albany, N. Y., assignor to Wheeler, Melick & Co. Horse hay-rake.	June 11, 1878	489	141	13	1080
207, 539	Mellen, George H. (See Turner, Nathan F., assignor.)					
208, 751	Melling, Thomas, Rainhill, England. Piston water-meter.	May 28, 1878	1224	349	13	998
8, 265	Mellinger, Christian K., Philadelphia, assignor of one-half interest to John Wesley Anderson, Fairfield, Pa. Jump-seat for carriages.	Aug. 27, 1878	947	278	14	337
199, 923	Mellon, Samuel, Cameron, W. Va. Vibrating churn.	Oct. 8, 1878	318	91	14	538
201, 934	Mellor, Alfred. (See Rittenhouse, Henry N., assignor.)					
204, 592	Mellor, Charles H., and Morris L. Orum, Philadelphia, Pa. Rotary cutter. (Reissue).	May 28, 1878	1299	370	13	1008
210, 618	Mellor, Henry M., Nottingham, England. Loop-wheel for knitting-machines.	Feb. 5, 1878	36	12	13	238
	Melton, Benjamin F., Gainesville, Tex. Saddle-tree.	Apr. 2, 1878	74	21	13	609
	Melvin, James S., Farmington, Ky. Apparatus for curing tobacco.	June 4, 1878	163	53	13	1036
	Melvin, Patrick H., Franklin, Pa. Rod-adjuster for oil-wells.	Dec. 10, 1878	261	71	14	866
201, 034	Menaar, Louisa A. (See Menaar & Sangster, assignors.)					
200, 405	Menaar, Nicholas A., and Hugh Sangster, Buffalo, N. Y., assignors to Louisa A. Menaar. Tea-kettle.	Mar. 5, 1878	215	67	13	448
205, 565	Mendenhall, Charles, Cincinnati, Ohio. Feed-water regulator.	Feb. 19, 1878	535	158	13	331
207, 293	Mendenhall, James M., Livermore, Cal. Gate.	July 2, 1878	109	31	14	22
206, 891	Mendham, William. (See Chambers & Mendham.)					
199, 305	Mendham, William, assignor to Cyrus Chambers, jr., Philadelphia, Pa. Brick-making machinery.	Aug. 20, 1878	672	200	14	298
208, 409	Mendleson, Aaron, Albany, N. Y. Composition for coating alkali balls.	Aug. 13, 1878	262		14	242
207, 763	Menge, Joseph, Point Michel, La. Dredging-machine.	Jan. 15, 1878	607	177	13	110
207, 194	Menger, Louis, Brooklyn, assignor to Martin Pollmann & Co., New York, N. Y. Violin-case.	Sept. 24, 1878	901	264	14	476
204, 908	Menkhoff, William, assignor to Henry Friedberger, Philadelphia, Pa. Straw-braid-sewing machine.	Sept. 3, 1878	182	56	14	372
209, 825	Mennerich, Henry L., Sioux City, Iowa. Horse-collar.	Aug. 20, 1878	571	171	14	284
200, 555	Mennis, Seabald, Brooklyn, N. Y. Stringing device for pianos.	June 18, 1878	582	155	13	1089
201, 265	Mensinga, Frederick C., New York, N. Y. Apparatus for mixing hydrocarbons with air and burning the same.	Nov. 12, 1878	318	94	14	727
	Mentzer, William G., Garrett, Ind., assignor of two-thirds interest to James S. Smith and Henry M. Jones. Gate.	Feb. 19, 1878	663	201	13	354
204, 750	Menuez, Vincent A., Michigan City, Ind. Ice-velocipede.	Mar. 12, 1878	453	140	13	489
	Menz, George W. (See Shaw & Menz.)					
204, 749	Menzies, Augustus A. (See Day, William H. H., assignor.)					
	Menzies, William, and Charles Blagburn, Newcastle-upon-Tyne, England, assignors of one-half interest to John Storer, Marlborough, N. Y. Steam-boiler.	June 11, 1878	339	102	13	1063
	Menzies, William J. (See Lewis & Menzies.)					
206, 469	Mercer, George, assignor of one-half interest to Joseph W. Branch, Saint Louis, Mo. Saw-gumner.	June 11, 1878	338	102	13	1062
190, 502	Mercer, James S., New York, N. Y. Sponge-holder for mucilage-bottles.	July 30, 1878	1163	333	14	172
208, 916	Mercant, Ira, Bloomington, Ill. Street-pavement.	Jan. 22, 1878	874	256	13	161
	Mercier, Edward, Springfield, Mass. Nursery-lamp chimney.	Oct. 15, 1878	508	147	14	568
203, 285	Merck, Thomas M. (See Banks & Merck.)					
200, 556	Meredith, Edmund J., Philadelphia, Pa. Gas-regulator.	May 7, 1878	52	16	13	827
208, 410	Meredith, Edwin, Batavia, Ill. Converting reciprocating into rotary motion.	Feb. 19, 1878	684	201	13	354
205, 406	Meredith, Fenton A., Hagerstown, Md. Bobbin-winder for sewing-machines.	Sept. 24, 1878	902	264	14	476
	Meredith, John, Aurora, Ill. Crown-sheet for locomotive-boilers.	June 25, 1878	1055	313	13	1143
	Meriden Britannia Company. (See Homan, William C., assignor.)					
	Same. (See Japson, John, assignor.)					
	Same. (See Savage, George E., assignor.)					
	Meriden Cutlery Company. (See Cody, Edwin, assignor.)					
	Same. (See Hallam, Robert W., assignor.)					
	Meriden Flint Glass Company. (See Hatch, George E., assignor.)					
207, 540	Meriden Malleable Iron Company, et al. (See Tucker, Hiram, assignor.) (Reissue).	Aug. 27, 1878	948	278	14	337
	Merideth, William H., New York, N. Y. Valve for radiator.					
	Merino Shoe Company. (See Hawley, Alfred A. and Robert B., assignors.)					
	Same. (See Houghton, Charles, assignor.)					
	Same. (See Palmer & Houghton, assignors.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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204, 443 8, 351	Meriwether, James McClure, Grayson, Ark. Cotton-gin.....	June 4, 1878	28	10	13	1016
	Merrell, G. Lewis, and Oscar F. Soule, Syracuse, N. Y. Apparatus and process for preserving and canning green corn..... (Reissue.)	July 23, 1878	1069		14	156
	Merrell, Harvey B., et al. (See Meaker, John W., assignor.)					
	Same..... (See Wight, Peter B., assignor.)					
205, 199	Merrell, Henry B., et al. (See Meaker, John W., assignor.)..... (Reissue.)	June 25, 1878	838	249	13	1135
202, 451	Merrell, Isaac L., San Francisco, Cal. Boiler-covering.....	Apr. 16, 1878	638	186	13	697
207, 884	Merrens, Henry J., Cleveland, Ohio. Machinery for manufacturing hose.....	Sept. 10, 1878	323	98	14	393
	Same..... Mechanism for the manufacture of pipes and tubes from rubber, paper, cloth, &c.					
205, 118	Merriam, George P., assignor to self, Samuel C. White, and Charles R. Valpey, Lynn, Mass. Hoof-moistener holder.....	June 18, 1878	738	219	13	1117
204, 066	Merriam, Henry C., United States Army. Knapsack.....	May 21, 1878	897	257	13	953
200, 797	Merriam, Iram Z., Dubuque, Iowa. Adjustable buggy-top.....	Feb. 26, 1878	945	278 279	13	401
	Merrick, Charles M. (See Whysall & Merrick.)					
200, 147	Merrill, Elisha H., assignor of one-half interest to L. W. Case, Winsted, Conn. Wagon-seat spring.....	Feb. 12, 1878	265	79	13	282
202, 182	Merrill, George P., and Patrick Dowling, Toledo, Ohio. Unloading cars.....	Apr. 9, 1878	348	102	13	652
208, 255	Merrill, Henry D., Shelbina, Mo. Flood-fence.....	Sept. 24, 1878	745	218	14	456
202, 933	Merrill, Henry E., Akron, Ohio. Roofing-tile.....	Apr. 30, 1878	1203	347	13	779
	Merrill, Luther M. (See Brackett & Merrill.)					
205, 886	Merrill, Rufus M., Chicago, Ill. Lawn-sprinkler.....	July 9, 1878	470	134	14	73
	Merrill, Rufus S. (See Johnson, Daniel A., assignor.)					
	Same..... (See White, John T., assignor.)					
200, 213	Merrill, Rufus S., Boston, Mass. Picture-hook.....	Feb. 12, 1878	326	98	13	292
201, 266	Same..... Lamp-stand.....	Mar. 12, 1878	454	140	13	489
201, 695	Same..... Picture-hook.....	Mar. 26, 1878	917	280	13	566
	Merrill, Simeon H. (See Edgar & Day, assignors.)					
199, 080	Merriman, Elias F., et al. (See Munger, George N., assignor.)					
201, 267	Merriman, Julius E., West Meriden, Conn. Drawer-pull.....	Jan. 8, 1878	372	110	13	75
	Merrin, William L., Fredericktown, Ohio, assignor of one-half interest to William Sturgeon. Organ-reed.....	Mar. 12, 1878	455	140	13	489
208, 411	Merritt, Benjamin, Newton, Mass. Scroll-sawing machine.....	Sept. 24, 1878	903	264	14	476
	Merritt, C. D., et al. (See Pine, John W., assignor.)					
	Merritt, Daniel H. (See Jacker, Maximilian, assignor.)					
	Merritt, E. (See Griffin, Alonzo, assignor.)					
	Merritt, Egbert F. (See Walsworth & Merritt.)					
200, 350	Merritt, Henry W., Somerville, assignor of one-half interest to William H. Ireland, Boston, Mass. Purifying gas.....	Oct. 29, 1878	995	289	14	642
209, 351	Merritt, Henry W., Somerville, assignor of one-half interest to William H. Ireland and William R. Stearns, Boston, Mass. Purifier and regulator for carbureters.....	Oct. 29, 1878	996	289	14	642
	Merritt, James M. (See Price & Merritt.)					
208, 623	Merryman, Andrew C. (See Patrick, William R., assignor.)					
204, 496	Merryman, Edward Clinton, Monkton, Ind. Bit-brace.....	Oct. 1, 1878	106	49	14	511
203, 551	Mersellis, John, Knowersville, N. Y. Tie for letter-packages.....	June 4, 1878	72	25	13	1022
207, 885	Mersereau, William T., Orange, N. J. Stud for frames and fender-bars.....	May 14, 1878	355	100	13	877
	Mershon, Aaron J., Warsaw, Ind. Rock-drilling machine.....	Sept. 10, 1878	323	99	14	393
	Mersick, Edwin F. (See English, James G., assignor.)					
	Same..... (See English & Mersick.)					
	Mersick, Edwin F., et al. (See Johnson, Albert W., assignor.)					
	Same..... (See Porter, Benjamin S., assignor.)					
	Merwin, Augustus W. (See Coulter, Thomas J., assignor.)					
201, 606	Mery, Michael L., Chico, Cal. Feeder for thrashing-machine.....	Mar. 26, 1878	918	281	13	566
204, 444	Merz, Henry, Milwaukee, Wis. School-desk.....	June 4, 1878	29	10	13	1017
208, 412	Meachenmoser, William, Greensburg, N. Y. Paper box.....	Sept. 24, 1878	904	265	14	476
207, 056	Meale, Franz J., Brooklyn, N. Y. Breech-loading fire-arm.....	Aug. 13, 1878	413	128	14	261
198, 896	Messenger, Charles, Cleveland, Ohio. Sash-balance.....	Jan. 1, 1878	176	50	13	36
8, 106	Messer, Louis, assignor to Zinn & Messer, New York, N. Y. Clasp for pocket-books. (Reissue.)	Feb. 26, 1878	973	286	13	406
8, 123	Same..... Fastening for pocket-books..... (Reissue.)	Mar. 12, 1878	525	161	13	498
201, 268	Messler, Arnold, Providence, R. I. Button.....	Mar. 12, 1878	456	140	13	489
202, 568	Messmer, Hermann, Magdeburg, Prussia. Tobacco-washer.....	Apr. 16, 1878	769	222	13	712
200, 469	Métais, Joseph, Chippewa Falls, Wis. Washing-machine.....	Feb. 19, 1878	508	176	13	341
208, 110	Metcale, David H., Battle Creek, Mich. Window-screen.....	Sept. 17, 1878	570	170	14	430
207, 057	Metcalfe, Martin, Battle Creek, Mich. Foundation for honey-combs.....	Aug. 13, 1878	415	128	14	261
198, 950	Metcalfe, Samuel, Poquonock, Conn. Wool-combing machine.....	Jan. 8, 1878	240	68, 69	13	52
200, 325	Meth, John Edward, and Wilhelm Lindemann, Grand Island, Nebr. Car-axle-box lid.....	Feb. 12, 1878	448	132	13	309
201, 813	Mets, Elisha, Rochester, N. Y. Flower-stand.....	Mar. 26, 1878	1038	317	13	584
202, 281	Mettam, Charles, New York, N. Y. Flying toy.....	Apr. 9, 1878	448	131	13	696
200, 557	Mettler, James I. and William J., Mendota, Ill. Tile-laying machine.....	Feb. 19, 1878	684	201	13	354
201, 548	Same..... same.....	Mar. 19, 1878	761	231 232	13	539
	Mettler, William J. (See Mettler, James I. and William J.)					
	Metz, John. (See Metz, Oliver and John.)					
210, 391	Metz, Julius, Denver, Colo. Mail-bag fastener and tag-holder.....	Nov. 26, 1878	957	270		819
200, 707	Metz, Oliver and John, Saint John's, Ohio. Gate-latch.....	Nov. 5, 1878	180	53	14	705
198, 902	Metzger, Jacob, Indianapolis, Ind. Bottle-stopper holder.....	Jan. 8, 1878	285	83	13	60
205, 803	Mey, Amelia, Buffalo, N. Y. Drier.....	July 9, 1878	383	110 111	14	61
203, 475	Mey, Fred. H. C., Buffalo, N. Y. Metallic belting for elevators.....	May 7, 1878	252	73	13	855
203, 476	Same..... Metallic belting.....	May 7, 1878	253	73	13	855
	Meyer, Abraham. (See Oselin & Meyer.)					
	Meyer, C. (See Olmstead, John A., assignor.)					
	Meyer, Charles A. (See Heller, Muller & Meyer.)					
	Meyer & Co., Henry C. (See Meyer, Henry C., assignor.)					
201, 814	Meyer, Edward W., New York, N. Y. Service-box.....	Mar. 26, 1878	1039	317	13	584
209, 770	Meyer, Emil, Kopenick, near Berlin, Prussia, Germany. Composition for forming cement, mortar coatings for walls, &c.	Nov. 12, 1878	264		14	720
	Meyer, Francis Ed. (See Schultze, Frederick E., assignor.)					
202, 452	Meyer, Francis Marion, Shannondale, Mo. Machine for setting tobacco-plants.....	Apr. 16, 1878	639	186	13	697
201, 822	Meyer, Frederick, New York, N. Y. Machine for trimming wooden boxes.....	Mar. 26, 1878	1047	320	13	585
203, 358	Meyer, Gustav A. C., Hannibal, Mo. Automatic fan.....	May 7, 1878	126	37	13	247
201, 815	Meyer, Henry C., assignor to Henry C. Meyer & Co., New York, N. Y. Water-closet supply-apparatus.....	Mar. 26, 1878	1040	318	13	584

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200, 623	Meyer, John Thiebaud, Rochester, N. Y. Lubricator.....	Feb. 26, 1878	768	226	13	375
	Meyer & Neubaur. (See Neubaur, Charles M., assignor.)					
	Meyer, Rudolph. (See Beach, William W., assignor.)					
	Meyers, Frederick J. (See Stockwell & Minninghoff, assignors.)					
	Meyers, Nicholas. (See Hoffman & Meyers.)					
208, 325	Meyers, William, Oakland, Cal. Converting motion.....	Sept. 24, 1878	817	239	14	465
202, 041	Meylan, Charles H., New York, N. Y. Chronograph-watch.....	Apr. 2, 1878	183	53	13	624
	Meyn, William. (See Stern & Meyn.)					
207, 541	Michael, Archibald M., assignor of one-half interest to George H. Clark, Lapeer, Mich. Stump-extracting machine.....	Aug. 27, 1878	949	278	14	337
	Michael, Francis M. (See Michael, Frederick, assignor.)					
208, 624	Michael, Frederick, assignor to self and Francis M. Michael, Eaton, Ohio. Evaporator.....	Oct. 1, 1878	167	49	14	511
202, 851	Michael, William, Harrison City, Pa. Vehicle-spring.....	Apr. 23, 1878	1087	310 311 277	13	760
202, 740	Michel, Charles, La Crosse, Wis. Bottle-washing machine.....	Apr. 23, 1878	966	278	13	745
	Same..... Device for securing corks in bottles.....	Sept. 17, 1878	661	194	14	442
208, 752	Michelson, Albert, San Francisco, Cal. Button.....	Oct. 8, 1878	318	91	14	539
208, 753	Same..... Button-fastener.....	Oct. 8, 1878	319	91	14	539
	Michigan Bolt and Nut Works. (See Hill, George B., assignor.)					
	Michigan Stove Company. (See Dwyer & Barbour, assignors.) (Reissue.)					
199, 849	Mickle, John, jr., et al. (See Atwater, Richard M., assignor.)	Jan. 29, 1878	1184	347	13	216
198, 897	Middleitch, John H., West Chester, N. Y. Instrument for administering balls to horses.....	Jan. 1, 1878	177	51	13	36
	Middleton, Arthur H., Philadelphia, Pa. Ladder.....					
	Middletown Plate Company. (See Conradt, Augustus, assignor.)					
199, 924	Mighell, Montville Pierce, Delta, Iowa. Barbed fence-wire.....	Feb. 5, 1878	37	12	13	238
203, 477	Mihan, Patrick, Cambridgeport, Mass. Chimney-cap or ventilator.....	May 7, 1878	255	74	13	855
203, 478	Same..... Stove-pipe thimble.....	May 7, 1878	256	74	13	855
205, 604	Same..... Steam-heat radiator, &c.....	July 2, 1878	215	64	14	36
206, 470	Mikeal, Thomas, Plainfield, Ind. Combined ladder and trestle.....	July 30, 1878	1104	334	14	172
198, 775	Millbank, George, Chillicothe, Mo. Middlings purifying and separating machine.....	Jan. 1, 1878	54	14, 15	13	16
198, 807	Milco, Giovanni Natale, Stockton, Cal. Insect-powder injector.....	Jan. 1, 1878	89	24	13	22
	Mildren, Edward J. (See Morrison, Mildren & Moore.)					
	Miles, Charles W., et al. (See Zimmerman, Arnold W., assignor.)					
207, 792	Miles, Frederick B. and Robert M., assignors to Robert M. Miles, Philadelphia, Pa. Portable railway-track.....	Sept. 3, 1878	210	65	14	375
205, 407	Miles, George, Grantville, Mass. Oil-still.....	June 25, 1878	1056	313	13	1163
205, 179	Same..... Apparatus for steaming wood.....	Oct. 22, 1878	816	236	14	614
	Miles, James R. (See Maupin, Lilbourn D., assignor.)					
204, 238	Miles, John A., Rio Vista, Cal. Tire-setter.....	May 28, 1878	1105	315	13	983
208, 688	Miles, Purches, New York, N. Y., assignor to Washburn & Moen Manufacturing Company, Worcester, Mass. Fence barb and staple.....	Oct. 8, 1878	252	72	14	530
	Miles, Robert M. (See Miles, Frederick B. and Robert M., assignors.)					
204, 837	Miles, Sweeting, Closter, N. J. Oatmeal-machine.....	June 11, 1878	439	128	13	1073
	Miles, T. C., et al. (See Leland, Edwin A., assignor.)					
209, 180	Miles, Thomas C., New York, N. Y. Spring-scale.....	Oct. 22, 1878	817	236	14	614
200, 062	Miles, William A., Copake Iron Works, N. Y. Operating charcoal-kilns.....	Feb. 26, 1878	812	239	13	381
208, 915	Miles, William A., Copake Iron Works, N. Y., and John H. Burghardt, Curtisville, Mass. Hot-blast oven.....	Oct. 15, 1878	507	146 147	14	568
	Millard, George, et al. (See Roberts, Edward J., assignor.)					
203, 752	Millard, Orson, assignor of one-half interest to Frank P. Hamilton, Flint, Mich. Air-forcing apparatus.....	May 14, 1878	555	157	13	902
208, 111	Millen, James, Stapleton, N. Y. Fruit-jelly.....	Sept. 17, 1878	571		14	430
205, 607	Miller, Aaron H., assignor of one-half interest to Joseph H. Davis, Atlanta, Ga. Hoe.....	July 2, 1878	218	64, 65	14	36
	Miller, Adam. (See Miller, Thomas S., assignor.)					
	Miller, Adolph, et al. (See Roberts, Edward J., assignor.)					
199, 658	Miller, Albert L., New York, N. Y. Car-coupling.....	Jan. 29, 1878	1003	292	13	188
209, 909	Miller, Andrew Alonzo, assignor of one-half interest to James W. Smith, Smithton, Ill. Harvester-rake.....	Nov. 12, 1878	402	120	14	739
207, 617	Miller, Anthony, Brooklyn, N. Y. Imitation of tortoise-shell.....	Sept. 3, 1878	33		14	353
8, 060	Miller, Anton, and Christian Worley, Saint Louis, Mo., assignors of one-half interest to John Finzer & Brothers, Louisville, Ky. Finishing tobacco-plugs..... (Reissue.)	Jan. 29, 1878	1222	359	13	222
203, 846	Miller, Asher M., Sturgis, Mich. Link-guide for car-coupling.....	May 21, 1878	666	189	13	923
202, 853	Miller, Cassius M. and Edgar E.; said Cassius M. Miller assignor to C. Aultman & Co., Canton, Ohio. Portable engine.....	Apr. 23, 1878	1088	311	13	761
203, 750	Miller, Cassius M., Canton, Ohio. Portable steam-boiler.....	May 14, 1878	553	156	13	902
206, 398	Miller, Cassius M., assignor of one-half interest to C. Aultman & Co., Canton, Ohio. Slide-valve for steam-engines.....	July 30, 1878	1087	312	14	162
202, 184	Miller, Charles C., assignor of one-half interest to Job E. Owens, Hamilton, Ohio. Shoal-indicator for ships.....	Apr. 9, 1878	351	103	13	652
202, 361	Miller, Charles C., Hamilton, Ohio. Brush for cleaning boiler-flues.....	Apr. 16, 1878	548	160	13	684
	Miller, Charles H., et al. (See Conway, William B., assignor.)					
	Miller & Co. E. (See Perkins, Russell B., assignor.)					
204, 836	Miller, David, and William H. Johnson, Harrodsburg, Ind. Drag-sawing machine.....	June 11, 1878	438	128	13	1073
	Miller, David J. (See Call, Albert, assignor.)					
202, 569	Miller, David P., Lodi, N. Y. Bee-hive.....	Apr. 16, 1878	770	222	13	713
209, 499	Miller, David W., Whitney's Point, N. Y. Washing-machine.....	Oct. 29, 1878	1146	334	14	664
210, 620	Miller, Ebenezer, Frederickton, New Brunswick, Canada. Shifting-rails for vehicles.....	Dec. 10, 1878	262	71	14	867
	Miller, Edgar E. (See Miller, Cassius M. and Edgar E.)					
202, 183	Miller, Edward D., Bloomington, Ill. Pencil-sharpener.....	Apr. 9, 1878	350	103	13	652
	Miller, Edward P., et al. (See Spees, David F., assignor.)					
	Miller, Edwin O. (See Miller, Ephraim G., Henry C., and Edwin O.)					
201, 816	Miller, Ephraim G., Henry C., and Edwin O., North Lewisburg, Ohio. Clothes-drier.....	Mar. 26, 1878	1042	318	13	584
	Miller's Falls Company. (See Pratt, Henry L., assignor.) (Reissue.)					
	Miller, Frank. (See Waterbury & Miller.)					
208, 414	Miller, Frederick C., Newport, Ky. Cigar mold and press.....	Sept. 24, 1878	906	265	14	476
209, 703	Miller, George, Salisbury, Mo. Hay-elevator.....	Nov. 5, 1878	181	53	14	705
201, 269	Miller, George F., Jacksonville, and Washington G. Benedict, Orange Park, Fla.; said Miller assignor to said Benedict. Machine for treating palmetto-leaves, &c.....	Mar. 12, 1878	457	141	13	490
203, 177	Same..... Treating palmetto fiber for use in the arts.....	Apr. 30, 1878	1427		13	809
	Miller, Henry. (See Frazee, George T., assignor.)					
206, 033	Miller, Henry, Providence, R. I. Stove-grate.....	July 16, 1878	636	184	14	98
	Miller, Henry C. (See Miller, Ephraim G., Henry C., and Edwin O.)					
	Miller, Henry F. (See Gibson, Joseph H., assignor.)					

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203, 751	Miller, Henry John, Oil City, Pa. Temper-screw for oil-wells	May 14, 1878	554	156	13	902
190, 730	Miller, Horace H., Lyndonville, Vt. Machine for dressing staves	Jan. 29, 1878	1069	313	13	199
	Miller, Isaac M. (See Miller, James W. and Isaac M.)					
	Miller, J. W., et al. (See Kerr, Christopher C., assignor.)					
8, 119	Miller, Jacob, Canton, Ohio. Harvester-rake. (Reissue)	Mar. 12, 1878	520	159	13	498
202, 854	Miller, Jacob, Washington, Pa. Stock-car	Apr. 23, 1878	1089	311	13	761
207, 618	Miller, Jacob, Canton, Ohio. Grain-spout register.	Sept. 3, 1878	33	11	14	353
208, 413	Same. Horse-power	Sept. 24, 1878	904	265	14	470
208, 837	Miller, James T., Urbana, Ohio. Wind-engine	Oct. 8, 1878	413	120	14	552
	Miller, James W. (See Miller, John W., assignor.)					
206, 471	Miller, James W., Newark, and Isaac M. Miller, Orange, N. J. Button and stud	July 30, 1878	1164	334	14	172
198, 851	Miller, John, Petersburg, and William B., Altoona, Pa. Shaft-tug	Jan. 1, 1878	130	37	13	29
201, 270	Miller, John, jr., Philadelphia, Pa. Gas regulator	Mar. 12, 1878	457	141	13	490
209, 181	Miller, John, Cambridgeport, Mass. Locking-device for gas and water pipes, cocks, &c	Oct. 22, 1878	818	237	14	614
201, 271	Miller, John A., Oakkosh, Wis. Saw-sharpening machine	Mar. 12, 1878	438	141	13	490
202, 042	Miller, John C., Bridgewater, Va. Fruit-picker	Apr. 2, 1878	183	53	13	625
204, 482	Miller, John F., Pittsburg, Pa. Spring draft-tug	Oct. 1, 1878	29	9	14	492
210, 621	Miller, John F., Decatur, Ill. Cover for coin-tray	Dec. 10, 1878	262	71	14	867
	Miller, John I. (See Barnes & Miller.)					
199, 731	Miller, John K., Pleasant Hill, Mo. Clothes-drier	Jan. 29, 1878	1071	313	13	199
201, 435	Same. Harrow	Mar. 19, 1878	646	197	13	523
206, 032	Miller, John L., Washington, D. C., and Henry H. Tallmadge and Elijah Brown, New York, N. Y. Automatic gas-lighter	July 16, 1878	634	184	14	98
205, 804	Miller, John Quinby, Emlenton, Pa. Packing for oil-well casings	July 9, 1878	380	111	14	61
205, 668	Miller, John S., Middletown, Conn. Tuyoer	July 2, 1878	217	64	14	36
	Miller, John W. (See Duffee, Manly J., assignor.)					
204, 161	Miller, John W., assignor of one-half interest to James M. Miller, Pittsburg, Pa. } Corn-sheller	May 28, 1878	1021	{ 290 } { 291 }	13	972
201, 272	Miller, Jonathan, Himrod's, N. Y., assignor to Pressure Extract Company, Trenton, N. J. Apparatus for making tea, coffee, &c.	Mar. 12, 1878	450	141	13	490
203, 178	Miller, Jonathan, assignor to Pressure Extract Company, Trenton, N. J. Apparatus for making coffee, tea, and other extracts	Apr. 30, 1878	1428	417	13	809
203, 179	Miller, Jonathan, Himrod's, N. Y., assignor to Pressure Extract Company, Trenton, N. J. Device for making tea, coffee, and other extracts	Apr. 30, 1878	1428	417	13	809
203, 180	Same. Floating cover for extract-receivers	Apr. 30, 1878	1429	417	13	809
204, 067	Miller, Jonathan, assignor to Pressure Extract Company, Trenton, N. J. Coffee-roaster	May 21, 1878	898	257	13	953
	Same. Combined urn and water-bottom	Nov. 26, 1878	733	223	14	793
210, 207	Miller, Joseph A., jr., Providence, R. I. Automatic fire-extinguisher	Nov. 12, 1878	403	121	14	739
209, 910	Miller, Joseph B., Wilkesbarre, Pa. Coal-breaker	Mar. 28, 1878	1043	318	13	584
201, 817	Miller, Joseph P., Philadelphia, Pa. Oyster-cooler	Nov. 5, 1878	93	27	14	693
209, 621	Miller, Joseph W., and Bernard Coll, Baltimore, Md. Sheet-metal can	Aug. 13, 1878	416	128	14	261
207, 058	Miller, Lebbens Baldwin, and Phillip Diehl, assignors to Singer Manufacturing Com- } pany, Elizabeth, N. J. Sewing-machine	Oct. 8, 1878	416	{ 120 } { 121 }	14	552
208, 838	Miller, Lewis, Akron, Ohio. Grain-binder	Jan. 1, 1878	179	51	13	36
198, 898	Same. same	Jan. 1, 1878	182	51, 52	13	37
198, 899	Miller, Louis, et al. (See Vernlund, Claudius, assignor.)					
	Miller, Martin D. (See Rowen & Miller.)					
205, 665	Miller, Michael R., and Absalom B. Worman, Bradyville, Pa. Receptacle for grocers' measures	July 2, 1878	216	64	14	36
	Miller, r. Minos. (See Gannett, Willard C., assignor.)					
209, 500	Miller, Peter, assignor of one-half interest to Alfred J. Cammeyer, New York, N. Y. Heel for boots and shoes	Oct. 29, 1878	1140	334	14	664
	Miller, Philip F. (See Goodfellow, John H., assignor.)					
207, 761	Miller, Robert R., Plantville, Conn. Running-gear for carriages	Sept. 3, 1878	181	55	14	372
203, 753	Miller, Samuel, Clinton, Iowa. Metallic fence-post	May 14, 1878	555	157	13	902
200, 624	Miller, Samuel P., Springfield, Ohio. Refrigerator for cooling articles under ground	Feb. 26, 1878	768	226	13	375
204, 472	Miller, Stephen S., Claverack, N. Y. Automatic wagon-brake	July 30, 1878	1165	334	14	172
200, 744	Miller, Thomas, Jersey City, N. J. Ale or beer measure	Feb. 26, 1878	896	263	13	393
203, 479	Miller, Thomas J., Scotland County, Mo. Gate	May 7, 1878	256	74	13	855
206, 959	Miller, Thomas S., Pomeroy, Ohio, assignor to Adam Miller, Harford, Pa. Horse hay-rake	Aug. 13, 1878	322	98	14	249
8, 323	Miller, Warren P., Brooklyn, N. Y., assignor, by mesne assignments, to R. Hoe & Co. Insertible saw-tooth	July 9, 1878	533	152	14	80
211, 037	Miller, Warren P., Brooklyn, N. Y., assignor to R. Hoe & Co., New York, N. Y. Saw-tooth	Dec. 17, 1878	745	204	14	935
204, 237	Miller, William, and John Schneider, Connorsville, Ind. Corpse-preserver	May 28, 1878	1103	315	13	983
207, 670	Miller, William, Cincinnati, Ohio. Shaking-grate for stoves	Sept. 3, 1878	87	20	14	360
199, 850	Miller, William A. L., San Francisco, Cal. Button, &c	Jan. 29, 1878	1185	347	13	216
201, 190	Miller, William Anderson, Rigdon, Ind. Wash-boiler	Mar. 12, 1878	371	115	13	478
	Miller, William B. (See Miller, John and William B.)					
205, 566	Miller, William J., et al. (See Bullock E. Koyl, assignor.)					
	Miller, William Lewis, Santa Rosa, Cal. Pump-valve	July 2, 1878	110	32	14	23
	Miller, William R. (See Hurst & Miller.)					
204, 068	Miller, William R., and Miller R. Creighton, Baltimore, Md. Manufacture of boots	May 21, 1878	900	258	13	953
205, 200	Miller, William R., Baltimore, Md. Manufacture of boots	June 25, 1878	839	249	13	1135
205, 288	Same. same	June 25, 1878	931	276	13	1147
200, 214	Miller, Willis E., New Haven, Conn. Carriage-axle	Feb. 12, 1878	327	98	13	292
	Miller, Wilson. (See Kelly, Edward J., assignor.)					
201, 097	Milligan, Henry C., Elizabeth, assignor to Newark Stamping Company, Newark, N. J. Plumber's tack	Mar. 26, 1878	910	281	13	566
205, 119	Milligan, Henry C., Elizabeth, N. J. Seam or joint for cans	June 18, 1878	738	220	13	1117
199, 851	Milligan, John F., assignor to Joseph W. Branch, Saint Louis, Mo. Circular saw	Jan. 29, 1878	1185	348	13	216
199, 852	Same. same	Jan. 29, 1878	1185	348	13	216
203, 359	Milligan, John F., assignor of one-half interest to Ezra H. Linley, Saint Louis, Mo. Shovel-handle	May 7, 1878	127	37	13	837
206, 814	Same. Tampering-cap for tool-handles	Aug. 6, 1878	159	50	14	226
207, 762	Milligan, John F., assignor of one-half interest to George S. Foster, Saint Louis, Mo. Platform weighing-scales	Sept. 3, 1878	182	56	14	372
202, 741	Milligan, Patrick F., and John F. Wood, Washington, D. C. Side-spring vehicle	Apr. 23, 1878	967	278	13	745
206, 034	Milliken, Alonzo, Brooklyn, N. Y. Umbrella-runner	July 16, 1878	637	184	14	98
8, 356	Milliken, Daniel L., Boston, Mass., and Hannah M. Pillsbury, Claremont, N. H., ex-centrix of Oliver M. Pillsbury, deceased, assignors to E. H. Hazleton, Chicago, Ill. Joint for stove-pipes	July 30, 1878	1365	392	14	197

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & Co.	Vol.	Page.
206, 345	Milliken, Edward K., Portland, Me. Transposition key-boards for pianos and organs.	July 23, 1878	1011	{ 288 } 289	14	149
199, 306	Milling, Henry, <i>et al.</i> (See Dette, H. J. Lewis, assignor.)					
200, 798	Millings, Robert Charles, Charleston, S. C. Revolving advertising-case	Jan. 15, 1878	609	178	13	111
200, 081	Millington, George W., Wilmington, Del. Car-axle	Feb. 26, 1878	946	279	13	402
205, 887	Millington, Isaac B., Columbia, Pa. Hydraulic ram	Feb. 5, 1878	194	61	13	263
	Millivee, Samuel N., assignor of one-half interest to Horace Foster, Knoxville, Tenn. Churn	July 9, 1878	471	134	14	72
203, 636	Mills, Frank Elmer, and Charlie Clager, Ann Arbor, Mich. Steamer or boiler for feed.	May 14, 1878	429	123	13	887
200, 745	Mills, Guy Carleton, assignor to Eaton & Ayer, Nashua, N. H. Loom-shuttle	Feb. 26, 1878	897	264	13	393
	Mills, J. J. (See Stimson, Alfred A., assignor.)					
207, 059	Mills, James, Kresseville, N. Y. Horse-nail machine	Aug. 13, 1878	417	129	14	261
	Mills, John. (See Ellms & Mills.)					
	Mills, John Y., <i>et al.</i> (See Quincy, Edmund W., assignor.)					
203, 930	Mills, Jonathan, Milwaukee, Wis. Grinding-mill	May 21, 1878	750	{ 216 } 217	13	935
	Mills, Morton E. (See Johnson & Mills.)					
	Mills, William H., <i>et al.</i> (See Quincy, Edmund W., assignor.)					
208, 256	Millsbaugh, William, Middletown, N. Y. Tool-handle	Sept. 24, 1878	746	219	14	456
209, 065	Same. Chopping-knife	Oct. 15, 1878	679	195	14	590
209, 704	Same. Tool-handle	Nov. 5, 1878	182	54	14	705
210, 799	Same. File	Dec. 10, 1878	449	126	14	891
190, 732	Milne, Alexander, and Armand Jourdain, Newark, N. J. Watch-crown	Jan. 29, 1878	1072	814	13	199
206, 598	Same. Watch-stem	July 30, 1878	1299	374	14	188
199, 925	Milsted, William N., New York, N. Y. Meter-governor	Feb. 5, 1878	38	12	13	938
200, 746	Miltimore, George W., New York, N. Y. Car-axle	Feb. 26, 1878	898	264	13	394
202, 362	Minahan, Michael, Portland, Oreg. Device for cutting screw-threads	Apr. 10, 1878	549	161	13	684
	Minary, Tom J. (See Speckman, Henry P., assignor.)					
	Minchin, George, <i>et al.</i> (See Jenkinson, George B., assignor) (Reissue.)					
	Same. (See Schwerin, Morris, assignor) (Reissue.)					
203, 480	Miner, Henry C., Stafford, N. Y. Wind-engine	May 7, 1878	257	74	13	856
203, 481	Same. Potato-digger	May 7, 1878	258	75	13	856
208, 326	Miner, Jacob G., New York, N. Y. Street lamp-post	Sept. 24, 1878	818	239	14	465
201, 273	Miner, James G., Saint Louis, Mo. Sectional boiler	Mar. 12, 1878	460	142	13	490
207, 886	Miner, Theodore, Brooklyn, assignor to Alvin Walker, New York, N. Y. Carbureter.	Sept. 10, 1878	325	99	14	393
	Miner, William Jefferson. (See Lindsay & Miner.)					
210, 954	Minich, Daniel, and George F. Godley, Philadelphia, Pa. Injector for steam-boilers	Dec. 17, 1878	641	178	14	923
204, 910	Minnemeyer, Henry W., Pittsburg, Pa. Back-band hook	June 18, 1878	533	156	13	1090
210, 622	Minnick, Lorenzo D., Rockford, Ill. Mowing-machine	Dec. 10, 1878	263	72	14	867
	Minninghoff, Joseph. (See Stockwell & Minninghoff.)					
202, 570	Miniss, Nathan S., and David A. Wray, Bradford, Pa. Methods of and apparatus for obtaining oil from oil-wells	Apr. 16, 1878	771	222	13	713
	Minshall, Cyrus B. (See Roseman, Edward D., assignor.)					
200, 558	Minshall, John E., Middletown, N. Y. Tube expander and trimmer	Feb. 19, 1878	685	{ 201 } 202	13	354
208, 533	Mitchel, Merit F., Ripon, Wis. Churn-dasher	Oct. 1, 1878	77	23	14	499
204, 069	Mitchell, Charles H., Chicago, Ill. Brake for elevators	May 21, 1878	900	258	13	953
205, 888	Mitchell, Charles M., Waterbury, Conn. Pipe-cover	July 9, 1878	471	134	14	72
	Mitchell, Edward L., <i>et al.</i> (See Burrell, Jarvis, assignor.)					
206, 815	Mitchell, Frank A., Norwich, Conn. Wind-engine	Aug. 6, 1878	160	50, 51	14	226
208, 917	Mitchell, Frederick W., Hudson, N. Y. Bed-bottom	Oct. 15, 1878	509	148	14	568
	Mitchell, Henry S. (See Harvey & Mitchell.)					
199, 926	Mitchell, John A., Maysville, Ky. Device for catching fish	Feb. 5, 1878	39	13	13	238
209, 285	Mitchell, John Henry, Bloomfield, Iowa. Ticket and label holder	Oct. 22, 1878	914	267	14	628
	Mitchell, Joshua W. (See Roper & Mitchell.)					
207, 764	Mitchell, Robert, Cincinnati, Ohio. Opera-chair	Sept. 3, 1878	184	56	14	372
209, 412	Mitchell, Robert Bower, Minneapolis, Kans. Plow	Oct. 29, 1878	1053	306	14	651
203, 754	Mitchell, Tom, Bradford, Great Britain. Bobbin used in spinning mohair, &c.	May 14, 1878	556	157	13	902
200, 869	Mitchell, William Brown, New York, N. Y. Transom-lifter	Mar. 5, 1878	55	19	13	423
209, 911	Mitchell, William S., Washington, D. C. Bridle-bit	Nov. 12, 1878	405	{ 121 } 122	14	739
205, 494	Mixer, George H., San Francisco, Cal. Bung-bush	July 2, 1878	31	10	14	13
209, 353	Same. Bush-insertor	Oct. 29, 1878	998	290	14	642
204, 838	Mizner, John, Grand Rapids, Mich. Rope-holder	June 11, 1878	440	129	13	1073
	Mobly, Thomas J. (See Petty & Mobly.)					
209, 912	Mock, Severin, Philadelphia, Pa. Automatic clearer for spinning-mules	Nov. 12, 1878	406	122	14	739
203, 181	Moench, George, Rushville, Ill. Millstone-ventilator	Apr. 30, 1878	1430	417	13	809
207, 294	Moench, George, Rushville, Ill. Grain-scourer	Aug. 20, 1878	673	200	14	298
	Moeslein, Valentine. (See Blackburn & Moeslein.)					
199, 853	Moesta, John Lorenz, Pittsburg, Pa. Reversible knob-latch	Jan. 29, 1878	1186	348	13	217
198, 951	Moffatt, Willoughby, assignor of one-half interest to Barney W. Short, Hornellsville, N. Y. Hame-fastener	Jan. 8, 1878	241	68	13	53
203, 360	Moffett, Howard Markus, assignor to self, John C. Hathaway, and Julius A. Moffett, Cleveland, Ohio. Door-bolt	May 7, 1878	128	37	13	838
	Moffett, Julius A., <i>et al.</i> (See Moffett, Howard Markus, assignor.)					
203, 182	Moffett, Sewall T., Lisbon, N. H. Machine for spirally sawing logs	Apr. 30, 1878	1430	418	13	809
	Moffitt, F. B. (See Darby, William, assignor.)					
207, 432	Moffitt, John A., assignor to self and Thomas Gurney, Boston, Mass. Self-closing valve for barrels, &c.	Aug. 27, 1878	828	245	14	322
208, 534	Moffitt, John R., Chelsea, Mass. Machine and process for shaping counter-stiffeners for boots and shoes	Oct. 1, 1878	78	23	14	499
209, 826	Moffitt, John R., Boston, Mass. Machinery for forming heel-stiffeners for boots and shoes	Nov. 12, 1878	320	95	14	727
200, 326	Mohler, Charles F. and James B., Pekin, assignors of one-half interest to Andrew J. Hodges, Peoria, Ill. Casting wheels	Feb. 12, 1878	449	132	13	310
	Mohler, James B. (See Hodges & Mohler.)					
	Same. (See Mohler, Charles F. and James B.)					
202, 742	Mohr, Carl, Worcester, Mass. Top-spinning toy pistol	Apr. 23, 1878	968	278	13	745
201, 118	Mole, John G., Batavia, Ill. Ball-target thrower	Mar. 12, 1878	305	93	13	468
208, 918	Molinier, Charles, Buzet, France, assignor to Charles Molinier & Co. (limited), London, England. Machine for dressing hides and skins	Oct. 15, 1878	510	148	14	568
	Molinier & Co., Charles. (See Molinier, Charles, assignor.)					
205, 495	Mollitor, John F., Vallejo, Cal. Barber's appliance	July 2, 1878	32	10, 11	14	13
205, 567	Moll, August, Brooklyn, N. Y. Star-braid	July 2, 1878	110	32	14	23
210, 869	Moll, August, New York, N. Y. Fringe	Dec. 17, 1878	535	151	14	911



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198, 776	Moller, Christian E., <i>et al.</i> (See Claude, Louis G., assignor.) Möller, Ernst. (See Hedges, Möller & Graf.) Molloy, Bernard C., London, and John D. Warren, South Kensington, England. Recovery of waste nitrous gases	Jan. 1, 1878	58	.....	13	16
200, 837	Moltrip, James C., assignor of two-thirds interest to William A. McCool and F. P. Grosscup, Perrysville, Ohio. Fertilizer-dropper	Mar. 5, 1878	24	8	13	418
203, 482	Monakay, Edward, assignor of one-half interest to William H. Tefft, Mineville, N. Y. Explosive compound	May 7, 1878	260	.....	13	856
204, 593	Monger, Francis M. (See Kerschner & Monger.)	June 4, 1878	164	53	13	1036
204, 594	Monger, Thomas S. (See Kerschner & Monger.)	June 4, 1878	165	54	13	1036
206, 473	Mongovan, Joseph A. (See Sterzing, Emil, assignor.) Monk, Henry, Troy, N. Y. Combined cigar-lighter and match-safe	July 30, 1878	1165	334	14	172
198, 750	Monks, John, Gloucester, England. Shaving apparatus	Jan. 1, 1878	21	5	13	12
206, 892	Monroe, E. P. (See Prindle, Edward T., assignor.) (Reissue.)	Aug. 13, 1878	263	80	14	242
209, 974	Monroe, Halsey H., Thomaston, Me. Broadcast-seeder	Nov. 19, 1878	490	149	14	754
210, 449	Monstery, Thomas Hoyer, New York, N. Y. Apparatus for teaching swimming	Dec. 3, 1878	172	46	14	845
207, 975	Montague, Benjamin F., Dunreith, Ind. Steam-engine	Sept. 10, 1878	429	126	14	405
202, 186	Montgomery, David C., assignor of one-half interest to Zachariah Montgomery, Saint Joseph, Mo. Brake-rod attachment	Apr. 9, 1878	354	103	13	653
204, 839	Montgomery, James M., jr., Columbus, Ohio. Wardrobe-bedstead	June 11, 1878	440	129	13	1074
210, 976	Montgomery, William Stephen, Marshalltown, Iowa. Combined lock-bolt and handle	Dec. 17, 1878	666	184	14	926
199, 087	Montgomery, Zachariah. (See Montgomery, David C., assignor.) Montross, Isaac T., Peekskill, N. Y. Stove-leg	Jan. 8, 1878	373	.....	13	75
208, 839	Moody, Charles D., <i>et al.</i> (See Thomas, David, assignor.) Moody, Henry S., assignor of one-half interest to Charles I. Karback and Joseph A. Coombs, Omaha, Nebr. Stock-car	Oct. 8, 1878	419	121	14	552
206, 683	Moody, William F., assignor of one-half interest to Thomas B. Jeffery, Chicago, Ill. Wire-coiling machine	Aug. 6, 1878	31	8, 9	14	210
201, 926	Moors, Alton H., North Ridgeville, Ohio. Coffin-shield	Apr. 2, 1878	75	21	13	610
205, 805	Moog, Egidi, Oggersheim, Bavaria, Germany. Clearing attachment for carding-machines	July 9, 1878	387	111	14	61
8, 486	Mook, Anson E., East Pembroke, N. Y. Bird-cage	Nov. 12, 1878	453	138	14	745
207, 433	Mook, Anson E., Pembroke, N. Y. Thill-coupling	Aug. 27, 1878	828	245	14	323
208, 919	Moon, Hiram E., Richmond, Ind. Desk	Oct. 15, 1878	511	{ 148 149 }	14	568
200, 559	Moon, William S., Pleasant Grove, Ga. Plow	Feb. 19, 1878	687	202	13	354
205, 889	Same. Cultivator	July 9, 1878	472	135	14	72
204, 498	Mooney, George, Providence, R. I. Egg-beater	June 4, 1878	73	25	13	1023
206, 400	Moore, Alfred William, London, England. Machine for trimming bristles	July 30, 1878	1090	312	14	163
203, 755	Moore, Andrew A., Sherman, Tex. Brick-press	May 14, 1878	556	157	13	902
207, 196	Moore, Benjamin F. (See Cryne, Gilbert S., assignor.) Moore, Charles H., Yonkers, N. Y. Water-closet	Aug. 20, 1878	573	172	14	285
207, 197	Same. Overflow and trap for basins	Aug. 20, 1878	574	172	14	285
201, 436	Moore, Charles R., <i>et al.</i> (See Alexander, Abram, assignor.) Moore, Charles T., White Sulphur Springs, W. Va., assignor of one-half interest to Lewis Clephane and J. H. Crossman, Washington, D. C. Preparing transfer-sheets or matrices for printing	Mar. 19, 1878	647	197	13	523
200, 148	Moore, Daily S., Chicago, Ill. Unloading rails and ties from cars	Feb. 12, 1878	266	79	13	282
205, 890	Moore, D. Eldridge, Prescott, Iowa. Corn-planter	July 9, 1878	473	135	14	73
201, 035	Moore, Edward Y., <i>et al.</i> (See Smith, Shadrach T., assignor.) Moore, Edward Young. (See Moore, Samuel Hallett and Edward Y.)	Mar. 5, 1878	216	68	13	448
201, 354	Moore, Ellis. (See Stevens & Moore.) Moore, Frederic H., Boston, Mass. Picture-frame-cord holder	Mar. 19, 1878	567	.....	13	512
208, 194	Moore, George H., Norwich, Conn. Filter	Sept. 17, 1878	662	195	14	442
198, 993	Moore, George W., Pittsburg, Pa. Heater and feeder for steam-boilers	Jan. 8, 1878	286	83	13	60
198, 994	Moore, Harrison B., Brooklyn, N. Y. Pulverizing-machine	Jan. 8, 1878	287	84	13	60
199, 090	Same. same	Jan. 8, 1878	376	{ 111 112 }	13	75
207, 977	Moore, Hartwell R., Norwalk, Ohio. Organ stop-action	Sept. 10, 1878	422	{ 127 128 }	14	406
199, 734	Moore, Henry C., Tama City, Iowa. Road-scraper	Jan. 29, 1878	1073	314	13	199
204, 751	Moore, James C., Philadelphia, Pa. Odorless garbage-receiver	June 11, 1878	340	103	13	1063
210, 464	Moore, James C., Henderson, Ky. Stave-jointer	Dec. 3, 1878	78	19	14	834
200, 560	Moore, James C., Peoria, Ill. Refrigerator	Feb. 19, 1878	687	202	13	354
201, 550	Moore, James D., Cambridge, Iowa. Copy-holder	Mar. 19, 1878	762	232	13	539
200, 561	Moore, James G., Lisbon, N. H. Machine for reducing wood to pulp for paper	Feb. 19, 1878	688	202	13	355
200, 327	Moore, James L. (See Coester & Moore) (Reissue.) Moore, James L., Bridgeport, Conn. Elastic garter	Feb. 12, 1878	449	133	13	310
204, 070	Moore, John, Salisbury, Mo. Sod-cutter and cotton-chopper	May 21, 1878	901	258	13	954
200, 870	Moore, John, Brooklyn, N. Y. Extension lock for doors	Mar. 5, 1878	57	20	13	423
203, 483	Moore, John C., Lowell, Mich. Fire-escape	May 7, 1878	260	75	13	856
199, 088	Moore, John E., Byron, N. Y. Honey-box	Jan. 8, 1878	374	111	13	75
206, 399	Moore, John P., De Mossville, Ky. Millstone-balancing device	July 30, 1878	1088	312	14	162
201, 449	Moore, John T., Robertsonville, Miss. Horse-power	Mar. 19, 1878	762	232	13	539
201, 551	Moore, Jonathan, jr., Brooklyn, assignor to J. L. Mott Iron Works, New York, N. Y. Register-box for heaters	Mar. 19, 1878	764	233	13	539
8, 214	Moore, Joseph, San Francisco, Cal., assignor of one-half interest to Francis Smith. Joint for sheet-metal pipes	May 7, 1878	306	87	13	862
199, 089	Moore, Joseph A., Indianapolis, Ind. Cabinet-desk	Jan. 8, 1878	375	111	13	75
203, 286	Same. Hinge for cabinet-desks, &c.	May 7, 1878	53	16	13	828
200, 926	Moore, Joseph Martial, Ovalla, Tex. Cotton-hoe	Mar. 5, 1878	105	35	13	431
207, 976	Moore, Le Roy, and John C. Scott, Pemberville, Ohio. Governor for steam-engines	Sept. 10, 1878	421	127	14	406
199, 733	Moore, L. T., <i>et al.</i> (See Roberts, Edward J., assignor.) Moore, Matthew, Whippany, N. J. Powder-duster for destroying insects	Jan. 29, 1878	1072	314	13	199
202, 454	Moore, McConnell. (See Morrison, Mildren & Moore.) Moore, Miles, Liber, Ind. Tile-machine	Apr. 16, 1878	641	187	13	697
201, 437	Moore, Moses M., Cleveland, assignor of one-half interest to Winslow L. Fay, Elyria, Ohio. Fare-box	Mar. 19, 1878	649	108	13	529
201, 438	Moore, Oliver O., Medina, N. Y. Churn	Mar. 19, 1878	649	108	13	523
206, 960	Moore, Robert Rea, Lewisville, Ark. Combined lamp and stove	Aug. 13, 1878	323	98	14	250
207, 195	Same. Vehicle-axle lubricator	Aug. 20, 1878	571	171	14	284

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196, 995	Moore, Robert S., <i>et al.</i> (See Healy, David, assignor.)	Jan. 8, 1878	288	84	13	60
207, 765	Moore, Rufus R., Modesto, Cal. Feeder for thrashing-machine	Sept. 3, 1878	185	56	14	372
202, 855	Moore, Samuel H., <i>et al.</i> (See Smith, Shadrach T., assignor.)	Apr. 23, 1878	1090	312	13	761
202, 282	Moore, Samuel T., Baltimore, Md. Bung-faucet	Apr. 9, 1878	448	131	13	666
204, 497	Moore, Silas Markham, assignor to William Hurlbut, Canastota, N. Y. Manufacture of knife-blades	June 4, 1878	73	25	13	1023
206, 188	Moore, Stephen Wall, Mount Etna, Ind. Gate	July 23, 1878	823	235	14	125
202, 363	Moore, Thomas B., <i>et al.</i> (See Hill & Jayne, assignors.) (Reissue.)	Apr. 10, 1878	550	161	13	684
204, 358	Moore, Thomas B., assignor of one-half interest to Charles L. Swope, Frankford, Pa. Manufacture of cartridge-shells	May 28, 1878	1226	349	13	998
204, 239	Moore, Thomas J. (See Warren, Edmond A., assignor.) (Reissue.)	May 28, 1878	1105	315	13	983
206, 346	Moore, Thomas M., Tyler, assignor to self and Richard Blair, Smith County, Tex. Plow	July 23, 1878	1013	289	14	149
8, 111	Moore, W. D., <i>et al.</i> (See Caum, Edward L., assignor.) (Reissue.)	Mar. 5, 1878	260	82	13	454
207, 766	Moore, Walter B. (See Buell, Madison, assignor.)	Sept. 3, 1878	185	57	14	372
208, 195	Moore, William A., Boylston, Mass. Refrigerating transportation can	Sept. 17, 1878	663	195	14	442
207, 978	Moore, William B., <i>et al.</i> (See Roberts, Edward J., assignor.)	Sept. 10, 1878	423	128	14	406
208, 578	Moore, William D., assignor of three-fourths interest to Mary A. T. Rooney, Mary E. Koonza, and Eliza Tobin, New York, N. Y. Water-velocipede	Nov. 5, 1878	43	12	14	686
201, 887	Moore, William H. (See Smith, Thomas S., assignor.)	Apr. 2, 1878	28	8	13	603
205, 496	Moore, William N., deceased, by William A. Strong, jr., administrator, assignor to Solar Stove Works, Joliet, Ill. Cooking-stove	July 2, 1878	82	11	14	13
203, 847	Moore, Wren, and John Shepherd, Sherburne, Ky. Sad-iron	May 21, 1878	666	189	13	923
201, 439	Moorlen, Frank. (See Hill & Moorlen.)	Mar. 19, 1878	650	198	13	524
204, 873	Moos, John P., Lincoln, Ill. Check-rower for corn-planters	June 11, 1878	477	138 139 140	13	1078
205, 120	Moran, Bernard, Brooklyn, N. Y. Manufacture of stationary wash-tubs of clay or porcelain	June 18, 1878	739	220	13	1117
205, 289	Morairty, Patrick, jr., <i>et al.</i> (See Roberts, Edward J., assignor.)	June 25, 1878	932	277	13	1147
206, 035	Moran, Thomas, assignor of one-half interest to Alfred Murphey, Erie, Pa. Oil-can	July 16, 1878	638	185	14	98
207, 887	Moran, Thomas W., Louisville, Ky. Barrel-filling device	Sept. 10, 1878	423	128	14	406
205, 201	Morden, William J., Indianapolis, Ind. Railway-crossing	Nov. 19, 1878	491	149	14	754
201, 274	More, Hiram, Chicago, Ill. Milk-strainer	Mar. 5, 1878	260	82	13	454
206, 474	Moreau, Eugene, San Francisco, Cal. Apparatus for the production of hot air	Apr. 2, 1878	28	8	13	603
200, 663	Moreau, Eugene, assignor to Moreau Machine Manufacturing Company, San Francisco, Cal. Button-hole-sewing machine	July 2, 1878	82	11	14	13
209, 975	Moreau, Eugene, and James W. Haggerty, San Francisco, Cal. Ammonia or ether machine	May 21, 1878	666	189	13	923
201, 037	Moreau, Eugene, and Samuel W. Dennis, assignor, by mesne assignments, to said Dennis and John B. Reynolds, San Francisco, Cal. Motor for dental pluggers	Mar. 19, 1878	650	198	13	524
204, 483	Moreau, Eugene, assignor to Moreau Machine Manufacturing Company, San Francisco, Cal. Turn-table for sewing-machines	June 11, 1878	477	138 139 140	13	1078
207, 201	Moreau, Eugene, San Francisco, Cal., assignor to American Mining and Dredging Company. Detritus-pump	June 18, 1878	739	220	13	1117
207, 201	Moreau Machine Manufacturing Company. (See Moreau, Eugene, assignor.)	June 25, 1878	932	277	13	1147
206, 188	Morehouse, William, Buffalo, N. Y. Carbureter	July 16, 1878	638	185	14	98
201, 274	Morel, James S., Savannah, Ga., and David R. Fletcher, Chambersburg, Ohio, assignor of one-third interest to James A. Watterson, Mercer's Bottom, W. Va. Plastic compound for paving and other purposes	Sept. 10, 1878	423	128	14	406
206, 474	Morel, James S., Savannah, Ga. Glove-electrode	Mar. 12, 1878	461	138	13	491
200, 663	Moreland, Nelson. (See Rock, Frederick, assignor.)	July 30, 1878	1166	335	14	172
209, 975	Morey, Parker F., Oakland, Cal. Purifying coal	Feb. 26, 1878	813	235	14	125
201, 037	Morey, Parker Farnsworth, San Francisco, Cal. Air-valve attachment for sewers	Nov. 19, 1878	491	149	14	754
207, 199	Morey, Roswell E., San Francisco, Cal. Handle for fruit-boxes	Mar. 5, 1878	260	82	13	454
204, 990	Morey, Roswell E., and Thomas H. McDonald, San Francisco, Cal. Berry-box	Aug. 20, 1878	575	172	14	285
210, 870	Morey, Stephen, Syracuse, N. Y. Hand-drill	June 18, 1878	614	180	13	1100
8, 527	Morgan, Alonzo R., Astoria, assignor to Open Stove Ventilating Company, New York, N. Y. Fire-place heater	Dec. 17, 1878	536	151	14	911
199, 164	Morgan, Charles E. (See Foster & Lockwood, assignors.)	Dec. 17, 1878	802	219 220	14	942
199, 459	Morgan, Charles H., Philadelphia, Pa., assignor, by mesne assignments, to Union Paper Bag Machine Company. Paper-bag machine	Jan. 15, 1878	469	138	13	89
201, 037	Morgan, Charles H., Worcester, Mass. Furnaces for heating iron and steel	Jan. 22, 1878	769	225	13	144
204, 483	Morgan, Charles H., Worcester, Mass. Furnaces for heating iron and steel	Mar. 5, 1878	217	68	13	448
207, 201	Morgan, Charles H., Worcester, Mass. Furnaces for heating iron and steel	Oct. 1, 1878	29	9	14	493
207, 201	Morgan, Charles H., Worcester, Mass. Furnaces for heating iron and steel	Aug. 20, 1878	567	173	14	285
207, 201	Morgan, Charles H., Worcester, Mass. Furnaces for heating iron and steel	Aug. 20, 1878	578	173	14	285
206, 189	Morgan, Charles Henry. (See Kenerson & Morgan.)	July 30, 1878	1001	312	14	163
208, 754	Morgan, Crawford C. (See Williams & Morgan.)	Sept. 17, 1878	571	171	14	430
206, 684	Morgan, Dayton S. (See Bordwell, Joseph, assignor.)	Jan. 8, 1878	378	112	13	75
206, 066	Morgan, Edward J. (See Fowler & Morgan.) (Reissue.)	Oct. 1, 1878	169	49	14	512
209, 975	Morgan, Elias M., assignor to Henry Reutcher, Belleville, Ill. Grain-drill	Aug. 27, 1878	829	245	14	323
208, 754	Morgan, Elisha, Springfield, Mass. Rotary card-cutter	Sept. 24, 1878	747	219	14	456
206, 066	Morgan, Francis M., Elizabeth City, N. C. Rail-joint	July 23, 1878	826	235 236	14	125
8, 251	Morgan, Henry P. (See Berlitz & Morgan.)	Oct. 15, 1878	679	196	14	590
204, 678	Morgan, Horace A., and Delos J. Gilleland, Decatur, Ill. Dust-deflector for cars	May 28, 1878	1263	365	13	1005
206, 401	Morgan, James, Pittsburg, Pa. Machine for punching and beveling metal	June 11, 1878	262	81	13	1053
198, 112	Morgan, James E., Paducah, Ky. Bee-hive	July 30, 1878	1001	312	14	163
198, 001	Morgan, John, Wheeling, assignor of one-half interest to S. Brady Morgan, Ohio County, W. Va. Device for working the rudders of vessels	Sept. 17, 1878	571	171	14	430
208, 625	Morgan, John, and Thomas Walton, Wheeling, W. Va. Lantern and lamp	Jan. 8, 1878	378	112	13	75
207, 434	Morgan, John C., Philadelphia, Pa. Ventilator for mines, cellars, and buildings	Oct. 1, 1878	169	49	14	512
208, 257	Morgan, Joseph E., Columbus, N. C. Seeder and planter	Aug. 27, 1878	829	245	14	323
206, 190	Morgan, Lewis, New York, N. Y. Dredge for salt, pepper, &c.	Sept. 24, 1878	747	219	14	456
202, 743	Morgan, Lyman, Port Washington, Wis. Grain-separator	July 23, 1878	826	235 236	14	125
199, 092	Morgan, Milo L., Northampton, Mass. Till-alarm	Apr. 23, 1878	969	278	13	745
207, 542	Morgan, S. Brady. (See Morgan, John, assignor.)	Jan. 8, 1878	379	112	13	75
	Morgan, Theophilus D., Pittsburg, Pa. Metallurgic furnace	Aug. 27, 1878	950	278 279	14	337
	Morgan, Thomas, assignor of one-third interest to William H. Green, Marquette, Mich. Wagon-tongue support					
	Morgan, Thomas R. (See Richardson & Morgan.)					
	Morgan, Thomas R., Alliance, Ohio. Steam-hammer					

*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
202, 366	Morgan, William, Jersey City, N. J. Machine for making retorts, crucibles, &c.....	Apr. 16, 1878	553	162	13	685
210, 139	Morgan, William, New York, assignor to self, John P. Cranford, and Nathan B. Abbott, Brooklyn, N. Y. Apparatus for drying and heating gravel, &c.....	Nov. 19, 1878	666	198	14	778
204, 071	Morgan, William A., Nola Chucky, Tenn. Churn-motor .....	May 21, 1878	903	258	13	954
203, 484	Morgan, William K., Alexandria, Ohio. Clothes-drier .....	May 7, 1878	261	75	13	856
199, 460	Morgans, William T., Liberty, N. Y. Hand-stamp .....	Jan. 22, 1878	770	226	13	144
206, 745	Moriarty, Matthew, Bangor, Me. Meat and pickle weight .....	Aug. 6, 1878	90	29	14	218
209, 182	Moritz, John D., et al. (See Andrews, Thomas B., assignor.) .....	Oct. 22, 1878	819	237	14	614
203, 756	Morley, Abraham, Cherokee, Kans. Middlings-separator .....	May 14, 1878	557	158	13	903
208, 416	Morley, Isaac, Pittsburg, Pa. Brick-machine .....	Sept. 24, 1878	908	266	14	477
	Same .....					
	Morreau, Joseph. (See Beausoleil & Morreau.) .....					
201, 275	Morrell, Benjamin D., Sharpsburg, Pa. Shock-binder .....	Mar. 12, 1878	462	142	13	491
202, 837	Morrell, Robert Wilson, Thomas and Joseph Parkinson, Bradford, England. Sewing-machine .....	Apr. 23, 1878	1092	312	13	761
202, 283	Morrell, Zachariah N., Luling, Tex. Fire-proof cotton-lint room .....	Apr. 9, 1878	449	132	13	666
204, 840	Same .....	June 11, 1878	441	129	13	1074
210, 140	Morrill, Charles, New York, N. Y. Bench-dog .....	Nov. 19, 1878	067	198	14	778
207, 671	Morrill, George P., Canterbury, N. H. Tool-handle attachment .....	Sept. 3, 1878	88	27	14	360
210, 703	Same .....	Dec. 10, 1878	346	95	14	877
	Morris, A. J. (See Timms, James, assignor.) .....					
208, 626	Morris, Abraham, New York, N. Y. Rocking-chair .....	Oct. 1, 1878	170	50	14	512
190, 093	Morris, Benjamin Franklin, Saltillo, assignor of one-half interest to T. F. Swift, Scott's Hill, and William H. Strickland, Decatur County, Tenn. Reversible plow .....	Jan. 8, 1878	379	113	13	76
205, 668	Morris, Benjamin Franklin, and Ephraim Henry Austin, Scott's Hill, Tenn. Cultivator and seeder .....	July 2, 1878	218	65	14	36
8, 059	Morris, George E., and Charles W. Gregory, Danville, Ill. Rail-joint..... (Reissue.) .....	Jan. 29, 1878	1221	359	13	222
203, 287	Morris, George M., Cohoes, and Joseph P. Hollenbeck, assignors to Edward O. House, Troy, N. Y. Button-hole attachment for sewing-machines .....	May 7, 1878	54	16, 17	13	828
	Morris, H. (See Morris, Henry G., assignor.) .....					
203, 183	Morris, Henry, assignor of one-half interest to Thomas L. Reed, Providence, R. I. Circular loom .....	Apr. 30, 1878	1431	418	13	809
200, 799	Morris, Henry G., assignor to H. Morris, Philadelphia, Pa. By-pass for gas-works .....	Feb. 26, 1878	947	279	13	402
201, 621	Morris, James P., Paris, Tex. Curtain-roller and bracket .....	Mar. 26, 1878	854	259	13	556
202, 364	Morris, James P., assignor of two-thirds interest to Gilbert G. Wright and Joseph K. Bywaters, Paris, Tex. Fire-escape ladder .....	Apr. 16, 1878	551	161	13	685
205, 568	Morris, John B., Cincinnati, Ohio. Sash-fastener .....	July 2, 1878	111	32	14	23
203, 361	Morris, John H. and William, Seward, Nebr. Animal-trap .....	May 7, 1878	129	58	13	838
200, 215	Morris, Joseph G., assignor of one-half interest to William H. Cremins, Chicago, Ill. Corn shelling and grinding machine .....	Feb. 12, 1878	328	99	13	292
209, 501	Morris, Joseph R., Houston, Tex. Heating-table .....	Oct. 29, 1878	1147	334	14	604
202, 365	Morris, Robert, Kansas City, Mo. Cartridge .....	Apr. 16, 1878	552	162	13	685
207, 336	Morris, Robert C., Olney, Ill., assignor of one-half interest to Hiram H. McLane, San Antonio, Tex. Car-journal cooler .....	Aug. 20, 1878	713	213	14	303
	Morris, William. (See Morris, John H. and William.) .....					
198, 996	Morris, William B., Collinsville, Cal. Mill-pick .....	Jan. 8, 1878	288	84	13	60
	Morris, William G. (See Smith, John T., assignor.) .....					
	Morris, William H. H. (See Brawley & Morris.) .....					
206, 893	Morrison, Enoch R., assignor of one-half interest to Stephen Curtis and Edwin H. Rowley, New York, N. Y., and Joseph E. Walter, Elizabeth, N. Y. Toy bank .....	Aug. 13, 1878	264	80	14	242
203, 485	Morrison, George W., assignor to self, Henry C. Carey, Abram Hart, and Elizabeth Rich, administratrix, Philadelphia, Pa. Combustion of fuel in steam-boiler furnaces .....	May 7, 1878	202	75	13	856
	Morrison, Henry A. (See Valentine & Morrison.) .....					
208, 840	Morrison, Henry A., Brooklyn, and Walter C. Hubbard, New York; said Morrison assignor to J. Kennett Kellogg, Brooklyn, N. Y. Machine for fastening tips upon umbrella-ribs .....	Oct. 8, 1878	421	121, 122	14	562
201, 191	Morrison, James Alexander, Karns City, Pa. Combined elevator and clamp for suck-ers of oil-wells .....	Mar. 12, 1878	371	116	13	478
208, 415	Morrison, John, Pittsburg, Pa. Furnace-door .....	Sept. 24, 1878	908	266	14	476
200, 475	Morrison, John T., Fort Concho, Tex. Breech-loading fire-arm .....	July 30, 1878	1107	335	14	172
198, 916	Morrison, Robert H. D., assignor of one-half interest to J. B. Kirch, Winona, Minn. Oscillating valve for steam-engines .....	Jan. 1, 1878	201	57	13	39
200, 562	Morrison, Thomas C., Brady's Bend, Edward J. Mildren and McConnell Moore, Black Lick, Pa. Forge .....	Feb. 10, 1878	689	203	13	355
205, 756	Morrison, William, Toronto, Ontario, Canada. Chemical fire-engine .....	July 9, 1878	330	96	14	54
198, 900	Morrison, William A., Frelighsburg, assignor to Elijah Edmunds Spencer, parish of St. Armand East, Quebec, Canada. Evaporating-pan .....	Jan. 1, 1878	185	52	13	37
	Morrison, William H. (See Siprell, Darius W., assignor.) .....					
205, 891	Morrison, William Henry, Canning, Ontario, Canada. King-bolt .....	July 9, 1878	474	135	14	72
205, 122	Morrow, James A., Bentonville, Ark. Apple-corer .....	June 18, 1878	741	220	13	1117
	Morrow, Robert G. (See Wilson & Morrow.) .....					
205, 290	Morrow, Silas Green Lee, New Bloomfield, Mo. Road-scraper .....	June 25, 1878	934	277	13	1147
	Morse, Begelew C. (See Frohisher, Benjamin C., assignor.) .....					
201, 818	Morse, Charles H., assignor of one-half interest to Charles A. Fuller and George H. Simpson, Minneapolis, Minn. Reversible cuff .....	Mar. 26, 1878	1044	319	13	584
208, 031	Morse, Charles L., Rochester, and Marion Sholes, Brockport, N. Y. Blacking-box .....	Sept. 17, 1878	495	147	14	420
207, 198	Morse, David, Lancaster, N. Y. Device for preventing myopia .....	Aug. 20, 1878	575	172	14	285
204, 240	Morse, Edmund L., assignor to S. B. Stevens & Co., New Orleans, La. Cotton-press .....	May 28, 1878	1107	316	13	983
201, 192	Morse, Edward, Boston, Mass. Machinery for applying rivets or clasps .....	Mar. 12, 1878	372	116		478
203, 063	Morse, Edward F., Plantsville, assignor of one-half interest to J. B. Savage, Southington, Conn. Auxiliary wick-raiser .....	Apr. 30, 1878	1304	379	13	793
205, 121	Morse, Edwin E., South Bethel, Me. Whiffle-tree-hook .....	June 18, 1878	740	220	13	1117
207, 061	Same .....	Aug. 13, 1878	419	130	14	261
	Same .....					
	Morse, Frank F. (See Morse, Henry T., Leander B., and Frank F.) .....					
	Morse, George A. (See Fees, Jacob W., assignor.) .....					
201, 935	Morse, Gilbert A., South Egremont, Mass. Die for making axle-boxes .....	Apr. 2, 1878	75	21	13	610
202, 856	Morse, Henry T., Leander B., and Frank F., Athol, Mass. Folding settee .....	Apr. 23, 1878	1090	312	13	761
209, 913	Morse, Horace R., Concord, Ohio. Gage-cock for steam-boilers .....	Nov. 12, 1878	407	122	14	739
207, 365	Morse, James Otis, Englewood, N. J. Stop-valve .....	Aug. 27, 1878	758	226	14	314
	Morse, Leander B. (See Morse, Henry T., Leander B., and Frank F.) .....					
205, 069	Morse, Orville M., Silver Creek, N. Y. Meal cooling and drying apparatus .....	July 2, 1878	220	65	14	36
208, 030	Morse, Thomas G., assignor to Jarecki Manufacturing Company (limited), Erie, Pa. Boring-machine .....	Sept. 17, 1878	494	147	14	420
	Morse Twist Drill and Machine Company. (See Stetson, George Ripley, assignor.) .....					
205, 202	Morse, William A., Philadelphia, Pa. Match-box .....	June 25, 1878	842	250	13	1136

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201, 276	Moras, Joab, Philadelphia, Pa. Spirit-level and plumb	Mar. 12, 1878	463	142	13	491
202, 453	Mortensen, Hans, Alma, Colo. Torpedo-boat	Apr. 16, 1878	640	187	13	697
	Morton, Alexander. (See Wood & Morton.)					
	Morton, Benjamin, et al. (See McLean, Alexander, assignor.)					
	Morton, Howard. (See Helm, J. Henry, assignor.)					
205, 972	Morton, James C., East Deering, Me. Rudder for vessels	July 16, 1878	578	165	14	91
207, 062	Morton, Samuel S., assignor of one-half interest to H. W. McCall, York, Pa. Fertilizer and grain-distributor	Aug. 13, 1878	420	130	14	262
	Moschowitz, Herman, et al. (See Jasper, Wilhelm, assignor.)					
	Moschowitz, Schamu M., et al. (See Jasper, Wilhelm, assignor.)					
204, 445	Moseley, Thomas W. H., Hyde Park, Mass. Steam-radiator	June 4, 1878	30	10	13	1017
207, 295	Moser, Felix P., Salem, Ill. Miter-clamp	Aug. 20, 1878	674	200	14	298
209, 413	Moses, Henriette, New York, N. Y. Sleeve-elevator	Oct. 29, 1878	1054	307	14	651
209, 622	Moses, Jabez H., and Francis M. Stewart, Half Rock, Mo. Bee-hive	Nov. 5, 1878	94	27	14	693
198, 952	Moses, William, Buffalo, N. Y. Lubricator	Jan. 8, 1878	242	69	13	53
	Mosher, Charles W., et al. (See Marsh & Berggroat, assignors.)					
201, 038	Mosher, Daniel J., Norwich, N. Y. Apparatus for developing the chest	Mar. 5, 1878	219	69	13	448
210, 871	Mosher, Martin J., Troy, N. Y. Bake-oven	Dec. 17, 1878	537	152	14	911
203, 757	Mosman, David, and Rodolphus L. Webb, assignors to Landers, Fray & Clark, New Britain, Conn. Inkstand	May 14, 1878	559	158	13	903
210, 265	Mosquera, José A., Caracas, Venezuela. Coffee-hulling apparatus	Nov. 26, 1878	811	240 241	14	800
209, 827	Moss, John, New York, John H. Smith and George J. Hill, Buffalo, assignors to Cash Recording Machine Company, New York, N. Y. Ticket printing and recording machine	Nov. 12, 1878	821	95, 96	14	727
200, 216	Moss, John C., New York, N. Y. Parallel ruler	Feb. 12, 1878	329	99	13	292
200, 328	Moss, John C., assignor to Photo-Engraving Company, New York, N. Y. Ruling-pen	Feb. 12, 1878	450	133	13	310
199, 563	Moss, John H., assignor of one-half interest to Boyd C. Bledsoe, Colliersville, Tenn. Vehicle-wheel	Jan. 22, 1878	875	256	13	161
209, 502	Moss, William H., and Oscar B. Day, New Richmond, Ohio. Washing-machine	Oct. 29, 1878	1148	334	14	664
202, 185	Mossman, Robert D., Bristol, N. H. Machine for making wood-pulp for paper	Apr. 9, 1878	353	103	13	653
202, 115	Mott, Catharine R., New York, N. Y. Fire-escape	Apr. 9, 1878	274	81	13	642
	Mott Iron Works, J. L. (See Demarest, John, assignor.)					
	Same..... (See Moore, James G., jr., assignor.)					
	Same..... (See Reid, John, assignor.)					
210, 704	Mott, Thomas Hoyt, New York, N. Y. Calendar-clock	Dec. 10, 1878	347	95	14	877
203, 288	Mottinger, Noah W., Massillon, Ohio. Curry-comb	May 7, 1878	58	17, 18	13	828
	Moulton, Byron P. (See Reyburn & Hunter, assignors) (Reissue.)					
	Moulton, Byron P., et al. (See Vermilya, Reyburn & Hunter, assignors) (Reissue.)					
	Moulton, L. V. (See Conley, John, assignor.)					
	Mowder, Isaac. (See Weatherbee & Mowder.)					
202, 367	Mowers, Peter A., Shippensburg, Pa. Coffin-handle	Apr. 16, 1878	554	162	13	685
210, 049	Moxham, Arthur J., Louisville, Ky. Manufacture of iron	Nov. 19, 1878	567	170	14	764
201, 193	Moyer, Elias W., Bernville, Pa. Axle-lubricator	Mar. 12, 1878	374	116	13	478
	Moynihan, Jerry, et al. (See Roberts, Edward J., assignor.)					
201, 888	Macpherson, David B., Madison, assignor of one-half interest to Andrew Albright, Newark, N. J. Potato-digger	Apr. 2, 1878	20	8	13	603
202, 187	Mudge, Carson, Bay Saint Louis, Miss., assignor of two-thirds interest to Ephraim K. Converse and Thomas S. Johnson, New Orleans, La. Laying flooring	Apr. 9, 1878	355	104	13	653
203, 064	Mudge, Charles F., and George Whitaker, Brooklyn, N. Y., assignors to James Tirrell, Boston, Mass. Rasp-machine	Apr. 30, 1878	1305	379 380	13	793
203, 064	Same..... File-cutting machine	Apr. 30, 1878	1307	380	13	793
200, 217	Mudgett, Joseph H., Comanche, Iowa. Fence-post	Feb. 12, 1878	331	99	13	292
208, 920	Muehling, Alexander, and Richard V. Davis, Philadelphia, Pa.; said Davis assignor to said Muehling. Machine for cutting fabrics	Oct. 15, 1878	512	149	14	509
	Mueller, Adolph, et al. (See Obernetter, Johann Baptist, assignor.)					
200, 871	Mueller, Hieronymus, and John Gross, assignors of one-third interest to F. A. Kormeyer, Decatur, Ill. Water-regulator	Mar. 5, 1878	59	20	13	424
208, 113	Mueller, Thomas, Zanesville, Ohio. Safety-car	Sept. 17, 1878	574	171	14	430
206, 036	Muir, Thomas, Andes, N. Y. Butter-worker	July 16, 1878	639	185	14	99
	Muirhead, Alexander. (See Taylor & Muirhead.)					
208, 665	Muirhead, John, jr., Westminster, England. Condensing resistance for electric telegraphs	Oct. 1, 1878	215	61	14	517
202, 858	Muldoon, George P., and Edgar P. Davis, Omaha, Nebr.; said Davis assignor to said Muldoon. Vehicle-spring	Apr. 23, 1878	1094	313	13	761
	Mulford & Bonnet. (See Hipperich, Adolphus, assignor.)					
209, 183	Mulford, Daniel L., New York, assignor to John O. Adair, Hornellsville, N. Y. Paper-damping implement	Oct. 22, 1878	821	237	14	614
200, 872	Mulford, Ichabod H., East Orange, N. J. Vehicle running-gear	Mar. 5, 1878	60	21	13	424
	Mulford, John E. (See De Bevoise & Luckenbach, assignors.)					
	Same..... (See Luckenbach & De Bevoise, assignors.)					
203, 637	Mull, Benjamin F., Merced, Cal. Earth-anger	May 14, 1878	430	123	13	887
206, 347	Mullens, William, Flat Creek, Tenn. Combined cotton chopper and cultivator	July 23, 1878	1014	290	14	149
	Müller, Frank M. (See Heilert, Müller & Meyer.)					
204, 595	Müller, Hermann, Hoboken, N. J., assignor to Solomon L. Cohen, New York, N. Y. Bung	June 4, 1878	168	54	13	1036
205, 123	Same..... Faucet attachment to casks and barrels	June 18, 1878	742	221	13	1118
203, 848	Müller, Jacob G., Buffalo, N. Y. Salve	May 21, 1878	667		13	924
208, 535	Müller, Julius James, San Francisco, Cal. Apparatus for saving float gold	Oct. 1, 1878	79	23	14	500
203, 184	Müller, Karl, Philadelphia, Pa. Gun-rest	Apr. 30, 1878	1433	419	13	810
204, 484	Mullett, Eugene Reuben, Clinton, Iowa. Packing and putting up rubber in sheets for dental and other purposes	Oct. 1, 1878	30	9	14	493
201, 039	Mullins, John Wesley, London, Ky. Mechanical movement	Mar. 5, 1878	220	69	13	449
203, 758	Same..... same	May 14, 1878	560	158	13	903
206, 121	Mullins, Michael J., New York, N. Y. Tenoning-machine	July 16, 1878	732	210 211	14	110
206, 476	Mullins, William, assignor of two-thirds interest to J. C. Williams and J. N. Sullivan, Flat Creek, Tenn. Vehicle-hub	July 30, 1878	1168	335	14	172
207, 888	Mumbrue, William B., Montour, Iowa. Churn-dasher	Sept. 10, 1878	328	99	14	394
206, 037	Mumford, Charles H., Providence, R. I. Button	July 16, 1878	639	185	14	99
204, 490	Mumford, Joseph Alexander, Avondale, Nova Scotia, Canada. Machine for sawing and jointing shingles	June 4, 1878	74	26	13	1023
	Munday, John W., et al. (See Kraus, John, assignor.)					
201, 819	Munday, John W., Chicago, Ill. Printer's galley	Mar. 26, 1878	1044	319	13	584

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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202, 571	Mundel, Jacob C., Arrowamith, Ill. Seeding-machine	Apr. 16, 1878	772	223	13	713
	Mundel & Co., John. (See Partridge, Edwin F., assignor.)					
	Munger, Edwin M., et al. (See Munger, George N., assignor.)					
	Munger, George, et al. (See Munger, George N., assignor.)					
	Munger, George B., et al. (See Munger, George N., assignor.)					
205, 124	Munger, George G., Rochester, N. Y. Lubricating compound	June 18, 1878	743	.....	13	1118
204, 163	Munger, George N., assignor to self, Elias P. Merriman, and Edwin M. Munger, New Haven, and George and George B. Munger, Madison, Conn. Stop-cock	May 28, 1878	1023	291	13	973
202, 744	Munger, Robert S., Mexia, Tex. Cotton-gin-saw cleaner	Apr. 23, 1878	970	279	13	745
204, 500	Munro, Carrie Aurelia, Salt Lake City, Utah. Vapor-bath	June 4, 1878	75	26	13	1023
204, 446	Munroe, Edwin P. (See Schneble, Martin, assignor.)					
	Monroe, James S., Lexington, assignor to Charles Fairchild, Boston, Mass. Wall-paper	June 4, 1878	81	.....	13	1017
	Monroe Reed Organ Company. (See Ewell, William F., assignor.)					
200, 747	Monroe, Roderick, Fitchburg, Mass. Screw-driver	Feb. 26, 1878	900	264	13	394
	Munson Brothers. (See Kendrick, Hiland H., assignor.)					
204, 359	Munson, David, Indianapolis, Ind. Lightning-rod	May 28, 1878	1227	350	13	999
204, 841	Munson, John D., Beloit, Wis. Plow attachment	June 11, 1878	442	129	13	1074
200, 470	Muntzenberger, Adolph, and Henry M. Underwood, Kenosha, Wis.; said Underwood assignor to said Muntzenberger. Machine for washing casks.	Feb. 19, 1878	590	176	13	341
	Munyon, Samuel. (See Wollo & Munyon.)					
203, 362	Munzer, William, New York, N. Y. Machine for pressing and molding substances into blocks	May 7, 1878	130	38	13	838
		Oct. 29, 1878	1148	335	14	665
209, 503	Murdoch, Charles F., Detroit, Mich. Self-closing valve					
201, 820	Murdoch, Edwin R., York, Nebr., assignor of two-thirds interest to G. W. Williams, sr., Eau Claire, Wis., and Rachel Godding, Beaver Crossing, Nebr. Machine for pressing straw, corn-stalks, &c., for fuel	Mar. 26, 1878	1045	319	13	585
205, 670	Murdoch, Richard, Baltimore, Md. Flower-stand	July 2, 1878	221	65, 66	14	37
	Murphy, Alfred. (See Moran, Thomas, assignor.)					
201, 821	Murphy, Joseph, assignor of one-half interest to Alfred B. Richman, Malaga, N. J. Wash-board	Mar. 26, 1878	1046	319	13	585
		Feb. 26, 1878	900	265	13	394
200, 748	Murphy, Benjamin, Allegheny, Pa. Power mechanism for hammers	May 14, 1878	430	124	13	867
203, 638	Murphy, Edward Thomas, Cambridgeport, Mass. Faucet-hole attachment to barrels	Apr. 16, 1878	642	187	13	698
202, 455	Murphy, Leander, assignor to self and E. C. Hough, Greensburg, Pa. Railway-frog					
	Murphy, Merrick. (See Murphy, Rufus W. and Merrick.)					
	Murphy, M. F. (See Murphy, Rufus W. and Merrick, assignor.)					
203, 185	Murphy, Philetus L., assignor of one-half interest to John B. Lu Gar, New York, N. Y. Dumping-scow	Apr. 30, 1878	1435	419	13	810
201, 277	Murphy, Rufus W. and Merrick: said Rufus W. Murphy assignor to M. F. Murphy, Saint Louis, Mo. Paper-bag machine	Mar. 12, 1878	463	143	13	491
	Same	Mar. 12, 1878	465	143	13	491
201, 278	Murphy, William H., Syracuse, N. Y. Car-axle	July 30, 1878	1300	374	14	188
206, 599	Same	Dec. 10, 1878	266	72	14	867
210, 623	Same	Feb. 5, 1878	40	13	13	239
199, 927	Murrairie, Edward, Rochelle, Ill. Horsehoe					
	Murray, Charles H. (See Hall, Joseph J., assignor.)					
204, 501	Murray, Eli, Rushville, Ind. Harrow	June 4, 1878	76	26	13	1023
210, 550	Murray, Thomas W. B., and Caleb J. Baker, Chicago, Ill. Camp-bed	Dec. 3, 1878	173	46	14	846
199, 094	Musgrove, Joseph, Wood Haven, assignor to Lalance & Grosjean Manufacturing Company, New York, N. Y. Candlestick	Jan. 8, 1878	380	113	13	76
	Musselman, David R. (See Dick & Musselman.)					
206, 961	Mustard, James Edgedee, Glen Hall, Ind. Wheel-cultivator	Aug. 13, 1878	324	99	14	250
203, 363	Muth, Augustus E., Cincinnati, Ohio. Molding bread	May 7, 1878	134	39	13	838
208, 327	Muth, Charles F., Cincinnati, Ohio. Centrifugal honey-extractor	Sept. 24, 1878	819	{ 239 } 240	14	465
	Muther, Lorenz. (See Armstrong, Woodward & Muther.)					
204, 241	Myers, Alfred M., Augusta, Ky. Churning apparatus	May 28, 1878	1108	316	13	983
208, 841	Myers, Charles E., Schoolcraft, Mich. Wind-engine	Oct. 8, 1878	422	122	14	553
203, 067	Myers, Christian, Napa City, Cal. Plow	Oct. 15, 1878	680	{ 196 } 197	14	591
	Myers, Ella D. (See Myers, Henry M., assignor.)					
203, 486	Myers, Frederick, New York, N. Y. Manufacture of packing-boxes	May 7, 1878	262	76	13	856
204, 163	Myers, Henry M., Beaver Falls, Pa. Manufacture of shovels	May 28, 1878	1024	291	13	973
208, 258	Myers, Henry M., assignor to Ella D. Myers, Beaver Falls, Pa. Handle-socket for shovels, spades, and scoops	Sept. 24, 1878	748	219	14	456
201, 907	Myers, John, Saint Louis, Mo. Weight for horseshoes	Apr. 2, 1878	76	21	13	610
	Myers, Mary A. (See Hughes, John W., assignor.)					
203, 289	Myers, William J., Hartford, Conn. Sofa-bedstead	May 7, 1878	59	18	13	828
202, 572	Mynatt, John B., Eata Boga, Ala. Water-bed fence	Apr. 16, 1878	773	223	13	713
201, 040	Myrick, Israel E., assignor of one-half interest to John F. Hollingsworth, Cleveland, Ohio. Motor for sewing-machines	Mar. 5, 1878	221	69, 70	13	449
209, 976	Naas, John P., San José, Cal. Wooden well-curb	Nov. 19, 1878	492	150	14	754
203, 552	Naatz, Rudolph, Berlin, Prussia, Germany. Cutter-head for frizzing-machines	May 14, 1878	356	100	13	877
201, 889	Nadelhoffer, John W., De Kalb, Ill. Barb for wire fences	Apr. 2, 1878	31	9	13	903
199, 307	Naeher, Charles, Brooklyn, N. Y. Check-valve for sewers	Jan. 15, 1878	609	178	13	111
205, 560	Nagle, Augustus F., Providence, R. I., assignor to Charles E. Whitin, trustee, Whitinsville, Mass. Press for pressing bricks and concrete blocks	July 2, 1878	111	33	14	23
210, 624	Nahe, Henry, Brooklyn, assignor to Horace Craighead, New York, N. Y. Lantern	Dec. 10, 1878	267	72	14	867
211, 036	Naphevs, George C., Philadelphia, Pa. Bail-ear for buckets and pails	Dec. 17, 1878	746	204	14	985
211, 037	Narracong, David, assignor to self and Jonas Narracong, Baraboo, Wis. Millstone-dressing machine	Dec. 17, 1878	747	204	14	986
	Narracong, Jonas. (See Narracong, David, assignor.)					
208, 921	Nash, Chester, Davis Junction, Ill. Cultivator	Oct. 15, 1878	514	{ 149 } 150	14	560
	Nash, William S. (See Emery, Thomas D., assignor.)					
8, 456	Nason, Joseph, Bangor, Me., and Joseph F. Wilson, Boston, Mass., assignors to John E. Goldsworthy, Gate (Reissue)	Oct. 15, 1878	725	210	14	597
	Nation, David H. (See Little & Nation.)					
	National Needle Company. (See Berry, John, assignor.) (Reissue.)					
	National Petroleum Gas Company. (See Haulon, John, assignor.) (Reissue.)					
	National Rubber Company. (See Simon, Gottlieb F., assignor.)					
200, 563	Naulty, John F., assignor of one-half interest to Charles S. Greene, Philadelphia, Pa. Disinfecting attachment to water-closets	Feb. 19, 1878	690	203	13	355
203, 186	Same	Apr. 30, 1878	1436	419	13	810
205, 892	Nauman, William H., Dayton, Ohio. Grain-drill	July 9, 1878	474	{ 135 } 136	14	73



## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
206, 894	Nannier, Mathias, assignor of one-half interest to Charles Clow, Port Byron, N. Y. Fork	Aug. 13, 1878	265	80	14	243
205, 497	Nawadny, Albert, New Orleans, La. Machine for boring brush-blocks.	July 2, 1878	34	11	14	13
200, 828	Same. .... same	Nov. 12, 1878	324	96	14	728
204, 164	Nay, Moses C., Boston, Mass. Sand-guard for carriage-axes.	May 28, 1878	1025	291	13	973
	Naylor, James, jr. (See Thomson & Naylor.)					
204, 679	Neal, George A., Smithfield, Ky. Automatic car-brake	June 11, 1878	262	82	13	1053
204, 072	Neal, Henry W., Wellsville, Pa. Whip-socket and rein-holder	May 21, 1878	903	259	13	954
201, 119	Neal, Thomas H., assignor of one-half interest to Marcus F. Richardson, Philadelphia, Pa. Atmospheric propeller for vessels	Mar. 12, 1878	306	93	13	468
	Nealley, E. H. (See Buzzell, Charles N., assignor.)					
207, 815	Neary, Edward, Neshanic, N. J. Window-screen	Sept. 10, 1878	245	77	14	343
	Neat & Co., Nathan. (See Schutz, Moritz C., assignor.)					
203, 639	Nebinger, George R., Philadelphia, Pa. Piston-packing	May 14, 1878	431	124	13	887
210, 800	Same. Churn	Dec. 10, 1878	450	127	14	891
208, 259	Necker, Carl, Berlin, Prussia. Sewing-machine	Sept. 24, 1878	749	220	14	456
199, 565	Needham, Benjamin Franklin and Laban Wickliffe, Newcastle, Ind. Wheel-cultivator	Jan. 22, 1878	877	257	13	161
199, 564	Needham, David, Oskaloosa, Iowa. Steam-heating apparatus	Jan. 22, 1878	876	256	13	161
8, 451	Needham, Elias P., New York, N. Y. Automatic musical instrument (Reissue.)	Oct. 15, 1878	718	208	14	596
	Needham, Laban Wickliffe. (See Needham, Benjamin Franklin and Laban Wickliffe.)					
202, 859	Needs, Alfred, Latrobe, Pa. Nut-lock	Apr. 23, 1878	1094	313	13	762
210, 705	Neff, John R., Philadelphia, Pa. Rail-chair	Dec. 10, 1878	348	95	14	877
	Negley, James S., jr., et al. (See Gillen, William S., assignor.)					
206, 600	Nelder, Fred. A., Augusta, Ky. Carriage-window	July 30, 1878	1301	374	14	189
208, 106	Same. Carriage-curtain window	Sept. 17, 1878	663	195	14	442
204, 680	Nell, John, Chicago, Ill. Liquid-forcing apparatus	June 11, 1878	264	82	13	1053
	Neil, Michael. (See Kirkbride & Neil.)					
208, 755	Neil, Michael, Dayton, and Wesley Young, Columbus, Ohio. Plashed fence	Oct. 8, 1878	323	92	14	539
208, 756	Same. .... same	Oct. 8, 1878	324	92	14	539
208, 757	Same. .... same	Oct. 8, 1878	324	92	14	539
	Neil, William O., et al. (See Ball, Edward Mosca, assignor.)					
204, 752	Neill, George W., Boston, Mass. Piano-forte action	June 11, 1878	341	108	13	1063
206, 328	Same. Action for upright pianos	Sept. 24, 1878	820	240	14	465
205, 973	Neill, John, Saint Joseph, Mo. Corn-planter attachment	July 16, 1878	579	165	14	91
210, 801	Same. Fluting-iron	Dec. 10, 1878	451	127	14	891
207, 435	Neimeister, Charles C., Chicago, Ill. Car-bumper	Aug. 27, 1878	830	246	14	323
205, 291	Neisser, Bruno A., Battle Creek, Mich. Lamp-bracket	June 25, 1878	935	277	13	1148
198, 832	Nellia, Aaron J., Pittsburg, Pa. Mold for casting metals	Jan. 1, 1878	130		13	29
199, 828	Nelson, Michael D., assignor of one-half interest to Samuel L. Yourtee, New Richmond, Ohio. Carbureting apparatus	Feb. 5, 1878	40	13	13	239
202, 745	Nelson, James Hervey, Wayne, Wis. Dumping-wagon	Apr. 23, 1878	971	279	13	746
198, 922	Nelson, James S., Indianapolis, Ind. Neck-yoke attachment for harness	Oct. 15, 1878	516	150	14	560
210, 349	Nelson, James S., Hillsborough, Ill. Breast-strap roller	Nov. 20, 1878	910	266	14	813
205, 757	Nelson, Nels P., Saint Peter, Minn. Shower-bath	July 9, 1878	331	96	14	54
	Nelson & Sons, Thomas. (See Berth, William R. E., assignor.)					
210, 802	Nelson, William C., Vallejo, Cal. Pump	Dec. 10, 1878	451	127	14	891
209, 829	Nemelka, Lorenz, Simmering, near Vienna, Austria. Roller-mill for reducing grain	Nov. 12, 1878	325	97	14	728
	Neptune Fog Horn Company. (See Smith & Booth, assignors.)					
209, 771	Nesbitt, Josiah, and Alexander Anderson, Toronto, Ontario, Canada. Curtain-roller	Nov. 12, 1878	265	70	14	720
199, 854	Netscher, John B., Mansfield, Ohio. Vinegar-generator	Jan. 29, 1878	1186	348	13	217
199, 650	Netzner, Louis, assignor of one-half interest to Bradley, Voorhees & Day Manufacturing Company (limited), New York, N. Y. Suspender-strap	Jan. 29, 1878	1004	292	13	189
207, 063	Neubauer, Charles M., Hoboken, N. J., assignor to Meyer & Neubauer, New York, N. Y. Fastening device for bird-cages	Aug. 13, 1878	421	130	14	262
	Neumann, Gustav H. (See Reichenbach, Adolf, assignor.)					
208, 202	Neuss, Hessel & Co. (See Thomas, Benjamin M., assignor.)					
203, 187	Neville, George L., and Leroy C. Godwin, Portsmouth, Va. Stamp-canceling device	June 25, 1878	935	277	13	1148
203, 467	New, James E., Binghamton, N. Y. Clothes-sprinkler	Apr. 30, 1878	1436	419	13	810
8, 387	Same. Sprinkler	May 7, 1878	204	76	13	857
8, 414	New, Tobias, Brooklyn, N. Y. Water-proof cellar (Reissue.)	Aug. 20, 1878	727	217	14	306
206, 351	New, Tobias, New York, N. Y. Fire and water proof roof (Reissue.)	Sept. 10, 1878	467	140	14	412
206, 601	New, Tobias, Brooklyn, N. Y. Water-proof cellar	July 23, 1878	1018	291	14	149
209, 131	New, Tobias, New York, N. Y. Paving and flooring tile	July 30, 1878	1302	374	14	189
209, 705	Same. Fire and water proof roof	Oct. 22, 1878	765	223	14	607
209, 830	Same. Manufacture of composite roofing	Nov. 5, 1878	183		14	705
	Same. Roofing material	Nov. 12, 1878	326		14	728
	Newark Stamping Company. (See Milligan, Henry C., assignor.)					
198, 808	Newbaker, John J., Pottsville, Pa. Oilier	Jan. 1, 1878	90	25	13	22
209, 914	Newberry, Henry S., Cleveland, Ohio. Car-ventilator	Nov. 12, 1878	408	123	14	740
204, 447	Newberry, Squires L., New York, N. Y. Amalgamator	June 4, 1878	82	10	13	1017
205, 408	Newell, Darius C., Yonkers, N. Y. Belt-shipper	June 25, 1878	1057	313	13	1163
203, 364	Same. Crushing and grinding roll	May 7, 1878	135	39	13	838
206, 257	Newell, Edward Leander, Butte City, Mont. Amalgamator	July 23, 1878	902	257	14	135
	Newell, George F., jr., et al. (See Newell & Croft, assignors.)					
203, 488	Newell, George F., sr., and Joseph Croft, said Croft assignor to Samuel L. Cox, jr., and George F. Newell, jr., Osseo, Wis. Cockle-separator	May 7, 1878	265	76	13	857
	Newell, John A. (See Lucasse & Newell.)					
202, 954	Newell, Lewis T., Albany, N. Y. Wire bale-band	Apr. 30, 1878	1204	348	13	779
206, 348	Newell, Nelson C., Springfield, Mass. Button	July 23, 1878	1015	290	14	149
204, 681	Newell, Thomas, Sacramento, Cal. Middlings-separator	June 11, 1878	265	82	13	1053
	New England Wardrobe Bedstead Company. (See Maine, Sebeus C., assignor) (Re-issue.)					
	New Era Coffee Company. (See Putnam, Silas S., assignor.)					
202, 955	Newhall, Joseph A. (See Bryer, Samuel G., assignor.)					
	Newhall, Timothy M., and Amos F. Chase, Lynn, Mass. Lasting boots and shoes	Apr. 30, 1878	1205	348	13	779
	New Haven Clock Company. (See Bryant & Hendrick, assignors.)					
	New Haven Folding Chair Company. (See Dunn & Kelsey, assignors.)					
	Same. (See Golithly & Twichels, assignors.) (Reissue.)					
208, 689	Newkirk, Edward F., Newark, Ohio. Detachable book-cover	Oct. 8, 1878	253	72	14	530
206, 746	Newland, James Bean, Sacramento, Cal. Wagon jack	Aug. 6, 1878	90	29	14	218
	Newman, James. (See Wall & Newman.)					
200, 149	Newman, James, Amenia, N. Y. Implement for filling cartridge-shells	Feb. 12, 1878	267	80	13	283
	Newman & Co., R. (See Flocke, Robert, assignor.)					
199, 736	Newson, Asa, Valdosta, Ga. Plow	Jan. 29, 1878	1075	314	13	199

*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
200, 927	Newsam, George, Leeds, England. Rotary printing-machine	Mar. 5, 1878	106	36	13	432
205, 570	Newton, Charles C., Cleveland, Ohio. Railway-car and coach heater	July 2, 1878	116	34	14	23
202, 368	Newton, George H., South Framingham, Mass. Coupling for air-brakes	Apr. 16, 1878	555	162	13	685
207, 816	Newton, Lester W. (See Hoss & Newton.)					
207, 816	Newton, Nelson A., Kalamazoo, Mich. Thill-coupling	Sept. 10, 1878	246	77	14	283
201, 279	Newton, Stephen S., Binghamton, N. Y. Mucilage-holder	Mar. 12, 1878	466	143	13	491
208, 690	Same. Bottle-stopper	Oct. 8, 1878	254	72	14	580
208, 758	Same. Blacking-bottle	Oct. 8, 1878	325	93	14	539
210, 872	Same. Mucilage-holder	Dec. 17, 1878	540	182	14	911
	New York Edge Trimmer Company. (See Helms, Charles H., assignor.)					
	New York Filter Company. (See Jennings, Ralph S., assignor.) (Reissue.)					
	New York Ore Separating Company. (See Conkling, John P., assignor.)					
	New York Flow Company. (See Pentreath & Crosby, assignors.)					
200, 749	Nichols, Albert T., Williamsport, Pa. Spring draft-tug	Feb. 26, 1878	902	265	13	394
201, 440	Nichols, Clifford C., Cincinnati, Ohio. Rocking-chair	Mar. 19, 1878	650	198	13	524
204, 763	Nichols, David Richardson, Alexandria Bay, N. Y. Animal-trap	June 11, 1878	342	104	13	1063
	Nichols, Edward A., et al. (See Gouge, Henry A., assignor.)					
	Nichols, Emanuel. (See Bowen & Nichols.)					
206, 962	Nichols, George W., Clinton, Iowa. Machine for trimming lumber	Aug. 13, 1878	325	99	14	250
205, 203	Nichols, Howard P., Reading, Mass. Lamp	June 25, 1878	842	250	13	1136
209, 354	Nichols, Isaac C., West Liberty, Iowa. Tile-machine	Oct. 29, 1878	998	290	14	642
	Nichol, J. C. (See Farrar, John, assignor.)					
208, 627	Nichols, James B., Evening Shade, Ark. Running-gear for wagons	Oct. 1, 1878	171	50	14	512
8, 454	Nichols, John, Gardner, assignor, by means assignments, to Thompson, Perley & Waite, Baldwinville, Mass. High chair for children (Reissue.)	Oct. 15, 1878	723	209	14	597
206, 602	Nichols, John, Baldwinville, assignor to Heywood Brothers & Co., Gardner, and Thompson, Perley & Waite, Baldwinville, Mass. Child's chair	July 30, 1878	1303	375	14	189
205, 125	Nichols, Joseph W., Mendon, Mo. Hen-nest house	June 18, 1878	743	221	13	1118
	Nichols, Martin V., et al. (See Lottridge, William, assignor.)					
210, 955	Nichols, Martin V., Osage, Iowa. Passenger-vehicle	Dec. 17, 1878	643	178	14	924
199, 929	Nichols, Moses, assignor of one-half interest to I. L. Sloat, Newburg, N. Y. Griddle greaser and holder	Feb. 5, 1878	42	13	13	239
200, 625	Nichols, Moses, Newburg, N. Y. Baking-oven	Feb. 26, 1878	770	226	13	375
	Nichols, William H. (See Penissat, André, assignor.)					
201, 041	Nichols, William H., assignor to Bevin Brothers Manufacturing Company, East Hampton, Conn. Call-bell	Mar. 5, 1878	222	70	13	440
210, 873	Nichols, William T., Chicago, Ill. Machine for bending metal	Dec. 17, 1878	540	153	14	911
201, 622	Nicholson, Ezekiel, Lynn, Mass. Cutting-block for leather-work	Mar. 26, 1878	854	259	13	556
209, 706	Same. Cutting-board for leather-work	Nov. 5, 1878	183	54	14	705
	Nicholson File Company. (See Nicholson, William T., assignor.)					
208, 842	Nicholson, Francis P., Philadelphia, Pa., assignor to self, Edward Hopper, Henry Bentley, and Thomas Williams, executors of estate of Charles Noble. Ornamental stove-plate	Oct. 8, 1878	423	122	14	553
	Nicholson, William H., et al. (See Atwater, Richard M., assignor.)					
200, 800	Nicholson, William H., Cincinnati, Ohio, assignor to self and Joseph M. Stephens. Washing-machine	Feb. 26, 1878	948	279	13	402
196, 777	Nicholson, William T., assignor to Nicholson File Company, Providence, R. I. File-handle	Jan. 1, 1878	60	15	13	16
200, 218	Same. File-cleaner	Feb. 12, 1878	331	100	13	293
204, 506	Same. File-holder	June 4, 1878	160	54	13	1937
	Nickel, Adam. (See Vessell, Nickel & Gross.)					
201, 280	Nickerson, Andrew C., Barnstable, assignor of one-third interest to J. W. Ellis, New Bedford, Mass. Cranberry-picker	Mar. 12, 1878	487	144	13	491
209, 184	Nickerson, John F., Lynn, Mass. Insole of boots and shoes	Oct. 22, 1878	822	237	14	614
203, 931	Nickerson, Joseph A., Boston, Mass. Connecting-tip for electrical conductors	May 21, 1878	752	217	13	935
199, 308	Nickerson, William E., Somerville, Mass. Machine for manufacturing circular saws	Jan. 15, 1878	610	178	13	111
201, 938	Same. Cutter for reducing bark	Apr. 2, 1878	77	22	13	610
204, 911	Nicol, Andrew, Scranton, Pa. Grate for stoves	June 18, 1878	534	156	13	1090
210, 430	Same. Hand-drill for stone-working, mining, &c	Dec. 3, 1878	41	10	14	829
199, 855	Nicolassen, Albert, assignor to Mary E. Nicolassen, Baltimore, Md. Stock-car	Jan. 29, 1878	1187	349	13	217
	Nicolassen, Mary E. (See Nicolassen, Albert, assignor.)					
204, 485	Nicolay, John G., Washington, D. C. Exercising-machine	Oct. 1, 1878	31	10	14	493
208, 985	Nicolier, Ferdinand Z., New York, N. Y. Key for musical string-instruments	Oct. 15, 1878	582	169	14	578
207, 767	Niece, Reuben K., Frenchtown, N. J. Cultivator	Sept. 3, 1878	186	57	14	372
199, 735	Niedringhaus, Frederick G. and William F., Saint Louis, Mo. Enameling sheet-iron ware	Jan. 29, 1878	1074	.....	13	199
200, 626	Same. Enameling sheet-iron ware	Feb. 26, 1878	770	.....	13	375
206, 816	Same. Water-cooler	Aug. 6, 1878	160	51	14	227
209, 132	Niedringhaus, Frederick G. and William F., assignors to Saint Louis Stamping Company, Saint Louis, Mo. Handle for tea and coffee pots of enameled-iron ware	Oct. 22, 1878	768	223	14	607
	Niedringhaus, William F. (See Niedringhaus, Frederick G. and William F.)					
207, 543	Niedringhaus, William F., Saint Louis, Mo. Marking and ornamenting glazed ware	Aug. 27, 1878	963	.....	14	238
203, 188	Nightengale, William O., assignor of one-half interest to John Lysaght, Johnstown, Pa. Brick-machine	Apr. 30, 1878	1437	420	13	810
206, 349	Nikiforoff, Constantin, Warsaw, Russian Empire. Portable cooking apparatus	July 23, 1878	1016	291	14	149
202, 573	Niles, Milton C. and Sidney S., Oak Park, Ill. Latch	Apr. 16, 1878	774	233	13	713
202, 574	Same. Spindle and fastening for door locks and latches	Apr. 16, 1878	775	223	13	713
205, 204	Same. Reversible latch	June 25, 1878	843	250	13	1136
	Niles, Sidney S. (See Niles, Milton C. and Sidney S.)					
202, 369	Niles, William F., Leominster, Mass. Button-polishing machine	Apr. 16, 1878	556	163	13	685
207, 889	Niles, William F., Brooklyn, N. Y. Button-polishing machine	Sept. 10, 1878	329	100	14	384
204, 360	Nilson, Nils, Minneapolis, Minn. Vehicle-spring	May 28, 1878	1229	350	13	999
201, 623	Nilson, Peter Frederick, Santa Rosa, Cal. Watch-case spring	Mar. 26, 1878	855	260	13	556
209, 772	Nisbet, James G., and James K. Vint, Cynthia, Ind. Grain-shelter	Nov. 12, 1878	206	79	14	721
204, 361	Nitschmann, Franz, Flatonia, Tex. Plow	May 28, 1878	1230	350	13	999
	Nittinger, August. (See McDowell, Abraham S., assignor.)					
200, 750	Nix, Manning Lafayette, James Mansfield Stone, and Levi Anderson, Paris, Tex. Cotton-seed planter	Feb. 26, 1878	902	265	13	395
206, 122	Nixon, Able R., Kansas City, Mo. Hoe	July 16, 1878	736	211	14	110
206, 685	Nixon, Francis M., assignor to self and George Breen, Lena, Ill. Fluting-machine	Aug. 6, 1878	32	9	14	210
206, 350	Nixon, Wallace W., Parkersburg, W. Va. Bosom-board	July 23, 1878	1017	291	14	149
210, 551	Same. Polishing-iron	Dec. 3, 1878	174	46	14	846
	Noble, Charles T. (See Whittlesey & Noble.)					
201, 120	Noble, Henry T., Dixon, Ill. Plow-clevis	Mar. 12, 1878	307	94	13	468

## Alphabetical list of patentees for the year 1878—Continued.

Date.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr.	Vol.	Page.
	Noble, J. D. ( <i>See</i> Dudley, James L., assignor.)					
209, 623	Noble, L. Davis, Cerro Gordo, Ill. Swing	Nov. 5, 1878	94	28	14	693
208, 032	Noble, Oscar W., Wakefield, Mass. Coffee-pot	Sept. 17, 1878	496	148	14	420
208, 329	Noble, William James, New York, N. Y. Burial-casket	Sept. 24, 1878	821	240	14	465
	Noe, Frank. ( <i>See</i> Franke, Theodore P., assignor.)					
	Noel, William. ( <i>See</i> Wheeler, William Lewis, assignor.)					
209, 068	Noelting, Bernhard H., Nebraska City, Nebr. Animal-trap	Oct. 15, 1878	681	197	14	591
200, 082	Nolan, John J., East Saginaw, Mich. Lamp-bracket	Feb. 5, 1878	195	61	13	263
204, 597	Same. Breading attachment to cutter-head	June 4, 1878	170	55	13	1037
201, 939	Nolty, Augustus John, Chattanooga, Tenn. Sealed can	Apr. 2, 1878	77	22	13	610
208, 759	Norcross, Edmund D., Cambridge, Mass. Draft-regulator for furnaces	Oct. 8, 1878	326	93	14	539
204, 598	Norcross, Joseph W., Boston, Mass. Rowlock	June 4, 1878	170	55	13	1037
209, 414	Same. Sail and rigging for vessels	Oct. 29, 1878	1055	307	14	651
200, 627	Nord, Andrew T., Brooklyn, N. Y. Lamp-burner	Feb. 26, 1878	771	237	13	375
200, 838	Nordblom, Ernst, and Lorenz Hansen, Chicago, Ill. Paper-folding machine	Mar. 5, 1878	25	8, 9	13	418
209, 286	Nödlinger, Isaac D., Stuttgart, Württemberg, Germany. Disintegrating the stalks of hops	Oct. 22, 1878	916		14	628
209, 977	Norgren, Martin, Chicago, Ill. Adding-machine	Nov. 19, 1878	493	150	14	754
201, 194	Normand, Jules H., and Leon Duffillo, Natchitoches, La. Medicated oil	Mar. 12, 1878	375		13	479
	Norrington, Henry H. ( <i>See</i> Tavener, Robert W., assignor.)					
203, 365	Norrington, Henry H., West Bay City, Mich. Bank-check book	May 7, 1878	136	39	13	838
209, 915	Same. Perforating-stamp	Nov. 12, 1878	409	123	14	740
	Norris, C. H. ( <i>See</i> Benham, William L., assignor.)					
8, 324	Norris, Daniel W., Elgin, Ill. Incased glass vessel. (Reissue)	July 9, 1878	534	{ 152 153 }	14	80
208, 628	Same. Same	Oct. 1, 1878	172	50, 51	14	512
209, 069	Norris, Edgar J., Baltimore, Md. Fire-kindler	Oct. 15, 1878	682	197	14	591
205, 893	Norris, Eli, California, Ohio. Apparatus for tempering cream preparatory to making butter	July 9, 1878	477	136	14	73
199, 220	Norris, Fred, and Clayton E. Sweet, Wappinger's Falls, N. Y. Bolt-holder and clamping-tool	Jan. 15, 1878	523	154	13	97
201, 624	Norris, William R., Fort Ann, N. Y. Planing-machine	Mar. 26, 1878	856	{ 260 261 }	13	556
210, 552	Norriess, William R., Baltimore, Md. Can-printing machine	Dec. 3, 1878	175	46, 47	14	846
199, 309	North, John, Keokuk, Iowa. Preventing incrustation in steam boilers	Jan. 15, 1878	611		13	111
211, 038	North, John, Middletown, Conn. Type-distributing machine	Dec. 17, 1878	748	{ 207 208 }	14	936
205, 126	North, Leonard H., Chicago, Ill. Railroad-frog	June 18, 1878	744	221	13	1118
	North & Co., O. B. ( <i>See</i> Cogswell, Ira, jr., assignor.) (Reissue)					
	Same. ( <i>See</i> Dudley, Charles, assignor.)					
	Same. ( <i>See</i> North, Oliver B., assignor.)					
202, 043	North, Oliver B., assignor to O. B. North & Co., New Haven, Conn. Adjustable carriage-top	Apr. 2, 1878	184	53	13	625
203, 553	Northey, Thomas, Hamilton, Ontario, Canada. Double stuffing-box for steam-pumps	May 14, 1878	356	101	13	877
200, 564	Northrop, Hiram D., assignor to Waterbury Clock Company, Waterbury, Conn. Clock striking-movement	Feb. 19, 1878	691	203	13	355
200, 471	Northrup, Edgar J., Warren, Pa. Oil-saver and casing-head	Feb. 19, 1878	601	177	13	341
205, 571	Northrup, Joel, Otisville, N. Y. Manufacture of boots and shoes	July 2, 1878	117	34	14	24
8, 249	Norton, Charles W. ( <i>See</i> Van Gumster, John, assignor.)					
204, 991	Norton, Edwin, Chicago, Ill. Canister (Reissue)	May 21, 1878	973	2, 7	13	962
	Norton, Edwin, assignor of one-half interest to William F. Baldwin, Boston, Mass. Broiling-chamber					
207, 544	Norton, Edwin, Chicago, Ill. Caddy	June 18, 1878	616	180	13	1100
209, 070	Same. Can	Aug. 27, 1878	954	279	14	338
207, 366	Norton, George B., Effingham, Ill. Weather-strip for door-sills	Oct. 15, 1878	683	197	14	591
201, 940	Norton, John Leonard, Memphis, Tenn. Machine for making cotton batting	Aug. 27, 1878	760	225	14	314
199, 988	Norton, Lyman, Hartford, N. Y. Harrow	Apr. 2, 1878	78	22	13	610
	Norwalk Lock Company. ( <i>See</i> Spencer, William D., assignor.)					
	Same. ( <i>See</i> Taylor, Thomas, assignor.)					
199, 737	Noteman, Alonzo, Toledo, Ohio. Rotary pump	Jan. 29, 1878	1075	315	13	199
209, 415	Northaf, John Lawrence, Denison, Tex. Riding-saddle	Oct. 29, 1878	1056	307	14	651
201, 281	Nourse, Joel, Boston, and James A. Howe, Ayer, Mass. Plow	Mar. 12, 1878	468	144	13	492
	Novelty Paper Box Company. ( <i>See</i> Heyl & Brehmer, assignor.) (Reissue)					
202, 860	Nowell, Robert G. M., Columbus, Ohio. Stench-trap	Apr. 23, 1878	1095	314	13	762
205, 758	Noye, John T., Buffalo, N. Y. Machine for condensing swill	July 9, 1878	332	97	14	54
209, 071	Noyes, Alvan A., Portland, Me. Label-holder	Oct. 15, 1878	684	198	14	591
204, 486	Noyes, Charles C., and David W., Boston, Mass. Scarf	Oct. 1, 1878	32	10	14	493
	Noyes, David W. ( <i>See</i> Noyes, Charles C. and David W.)					
203, 489	Noyes, Henry F., Boston, Mass. Carpet-sweeper	May 7, 1878	266	76	13	857
206, 352	Noyes, Ira M., Saint Cloud, Minn. Stump-extractor	July 23, 1878	1019	291	14	150
199, 378	Noyes, La Verne W., Batavia, Ill. Horse hay-fork	Jan. 22, 1878	690	203	13	131
	Noyes, Person. ( <i>See</i> Kidder, Moses W., assignor.)					
210, 141	Noyes, Person, Lowell, Mass. Gas-pressure regulator	Nov. 19, 1878	668	198	14	778
208, 417	Noyes, Walter B., Boston, Mass. Curtain roller and bracket	Sept. 24, 1878	912	267	14	477
199, 461	Nunn, William J., Boston, Mass. Fire-escape	Jan. 22, 1878	770	226	13	144
205, 671	Nusbaum, Henry P., Libertytown, Md. Feed attachment for guano-drills	July 2, 1878	221	66	14	37
209, 504	Nusbaum, Peter, Saint Louis, Mo. Vent-spike and valve for beer-barrels	Oct. 29, 1878	1150	335	14	665
	Nute, Alonzo I. ( <i>See</i> Cloutman, Charles L., assignor.)					
207, 768	Nutrizio, Henry, Philadelphia, Pa. Coffee-pot	Sept. 3, 1878	187	57	14	373
209, 185	Nye, Charles H., Baltimore, Md., assignor to self, and, by mesne assignment, to Monroe L. Rose and Henry P. Hildreth, New York, N. Y. Can for fluids	Oct. 22, 1878	823	238	14	615
210, 050	Nye, Charles H., assignor of one-half interest to Charles H. Stevenson, Baltimore, Md. Car-brake					
211, 039	Same. Car-starter	Nov. 19, 1878	569	171	14	764
204, 754	Nye, Hiram F., West Dennis, Mass. Picture-rod molding	Dec. 17, 1878	754	206	14	936
	Nye, J. R. ( <i>See</i> Greenwood, John T., jr., assignor.)					
	Nystrom, Johan Frederick. ( <i>See</i> Wooldridge, Nystrom & Howard.)					
199, 566	Nyvall, Hjalmar, Chattanooga, Tenn. Mosquito-net frame	Jan. 22, 1878	877	257	13	161
	Oak & Co., Lyndon. ( <i>See</i> Fogg, Jason T., assignor.)					
	Oakes, E., et al. ( <i>See</i> König, Joseph Heinrich, assignor.)					
	Oakford, Eliza. ( <i>See</i> Gernert, Charles, assignor.)					
203, 366	Oakley, John M., Brooklyn, N. Y. Washing-machine	May 7, 1878	137	39	13	839
208, 487	Oakman, Samuel, Boston, Mass. Bottle-stopper	Oct. 1, 1878	32	10	13	493
201, 823	Oaks, D. Brainard, Pittsburg, Pa. Folding stool	Mar. 26, 1878	1048	320	14	585

*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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201, 195	Ober, Charles H. and Reuben H., Garrettsville, Ohio. Combined flour chest, sifter, and safe	Mar. 12, 1878	375	116	13	479
201, 552	Ober, Reuben H. (See Ober, Charles H. and Reuben H.)					
208, 114	Obernrdorfer, Abrann, Norfolk, Va. Bag-lock	Mar. 19, 1878	765	233	13	540
208, 114	Obernretter, Johann Baptist, Munich, Bavaria, assignor to B. F. Powelson and Adolph Mueller, Detroit, Mich., and W. A. Cooper and W. E. Lindop, St. Thomas, Canada. Photo-mechanical printing	Sept. 17, 1878	575	.....	14	431
209, 186	Obert, Francis J. (See Dauth, John P., assignor.)					
8, 021	Obert, Francis J., jr., Reading, Pa. Composition for removing incrustations from steam-boilers	Oct. 22, 1878	822	.....	14	615
199, 095	O'Brien, Daniel, Brooklyn, N. Y. Dumping-car	Jan. 1, 1878	211	59	13	40
199, 095	O'Brien, George, London, England. Amalgamator	Jan. 8, 1878	381	113	13	76
201, 441	O'Brien, James. (See Randall & O'Brien.)					
208, 488	O'Brien, John, New Britain, Conn. Plant-duster	Mar. 19, 1878	651	199	13	524
209, 417	O'Bryon, William E., Ionia, Mich. Writing-tablet	Oct. 1, 1878	33	10	14	493
209, 910	Same. Case for writing-tablet	Oct. 29, 1878	1062	308	14	652
205, 127	Ochsner, Anton, New Haven, Conn. Fire-escape	Nov. 12, 1878	410	123	14	740
206, 963	O'Connor, William D., Washington, D. C. Method of stamping cigars with revenue stamps	June 18, 1878	745	221	13	1118
206, 963	Ocuppaugh, Edmund, et al. (See Burbank, Abner, assignor.)					
209, 416	Odendahl, William D., assignor of two-thirds interest to John R. Griffith and William A. Adams, Saint Louis, Mo. Millstone-dress	Aug. 13, 1878	326	99	14	250
200, 329	Odhnor, Willgodt, assignor to Konigsberger & Co., St. Petersburg, Russia. Calculating-machine	Oct. 29, 1878	1057	308	14	651
198, 853	Odling, Charles. (See Bott, Joseph E., assignor.)					
209, 579	O'Donnell, Francis B., assignor of one-half interest to George W. Sutley, Franklin, Pa. Well-tube clamp	Feb. 12, 1878	451	133	13	810
209, 579	Oehlcker, Heinrich Carl Franz, Hamburg, Germany. Dental articulator	Jan. 1, 1878	131	37	13	29
202, 450	Oelchlegel, Anton, Boston, Mass. Chimney	Nov. 5, 1878	44	12	14	696
204, 073	Oerting, P. J. McKenzie, et al. (See Hansen, Charles, assignor.)					
201, 282	Oerting, S., et al. (See Hansen, Charles, assignor.)					
204, 073	Oesterle, Johann Georg, Francisco, Mich. Washing-machine	Apr. 16, 1878	642	187	13	608
201, 282	Offner, William, Jersey City Heights, N. J. Tassel	May 21, 1878	904	259	13	954
205, 759	Ogborn, Harrison, Richmond, assignor of one-half interest to Samuel Watson, Dublin, Ind. Wardrobe-bedstead	Mar. 12, 1878	471	144	13	492
204, 302	Ogburn, Samuel D., et al. (See Palmer, Charles, assignor.)					
204, 302	Ogden, Ferris, assignor to Aultman & Taylor Company, Mansfield, Ohio. Valve-gear for engines	July 9, 1878	333	97	14	55
209, 917	Ogden, Joseph, and Joseph Garrett, Chester, Pa. Cop-building rail for spinning-mules	May 28, 1878	1231	350	13	990
207, 890	Ogilvie, William Henry, Brooklyn, N. Y. Umbrella-frame	Sept. 24, 1878	751	220	14	456
204, 074	O'Hara, Patrick H., New York, N. Y. Stand for showing cloaks	Nov. 12, 1878	412	123	14	740
204, 074	O'Hara, David J., Reno, Nev., assignor of one-half interest to J. F. Ferguson. Furnace for roasting ores	Sept. 10, 1878	332	100	14	394
206, 353	Ohl, George A. (See Burritt & Ohl.)					
198, 809	Ohmer, George, Dayton, Ohio. Cigar-tip cutter	May 21, 1878	905	259	13	954
208, 418	O'Keefe, William, Saint Louis, Mo. Hydraulic elevator	July 23, 1878	1020	292	14	150
202, 284	Okelund, Peter, San Francisco, Cal. Fifth-wheel for vehicles	Jan. 1, 1878	91	25	13	22
202, 284	Okolowicz, Auguste A. X., Molenbeck-lez-Bruxelles, Belgium. Applying colors to earthenware, &c.	Sept. 24, 1878	913	.....	14	477
202, 746	O'Lally, Patrick K., Boston, Mass. Bung and bushing	Apr. 9, 1878	450	132	13	606
202, 296	Olbrich, Henry Edward. (See Bochner & Olbrich.)					
203, 554	Oldendorph, Jacob, jr., Waterloo, Ill. Plow	Apr. 23, 1878	972	279	13	746
206, 123	Oldershaw, John B., Baltimore, Md. Stove	Aug. 20, 1878	674	200	14	286
199, 310	Oldrieve, Silvanus R., Cincinnati, Ohio. Device for heating tools	May 14, 1878	357	101	13	877
202, 575	Olds, Daniel S., Stamford, Conn. Smoke-consuming furnace for boilers	July 16, 1878	736	211	14	110
204, 682	Olds, John D., Fort Wayne, Ind. Carriage-seat	Jan. 15, 1878	612	178	13	111
204, 165	Same. same	Apr. 16, 1878	777	224	13	713
205, 293	Olin, Millard M., Anton Zwiebel, and William A. Bennett, Burlington, Wis. Whiffle-tree-hook	June 11, 1878	266	83	13	1053
198, 854	Oliver, David, Chicago, Ill. Oatmeal-machine	May 28, 1878	1025	292	13	973
199, 311	Same. same	June 25, 1878	936	278	13	1143
208, 261	Oliver, David B., Pittsburg, Pa. Pile for making skelps	Jan. 1, 1878	132	37	13	29
200, 150	Same. Pile	Jan. 15, 1878	613	179	13	111
210, 350	Oliver, Ebenezer, New York, N. Y. Sieve	Sept. 24, 1878	753	220	14	456
202, 457	Oliver, Henry F. (See Briggs, Orlando P., assignor.)					
205, 894	Oliver, Hiram, et al. (See Oscar, Albert, assignor.)					
209, 335	Oliver, James H., Baltimore, Md. Preserving juices of green corn	Feb. 12, 1878	268	.....	13	283
199, 989	Oliver, M. W. (See Gessert, Charles Fremont, assignor.)					
209, 581	Oliver, Milton B., assignor of one-half interest to S. P. Ayres, Osceola, Iowa. Feed-cooker and steam-generator	Nov. 26, 1878	910	286	14	813
202, 457	Oliver, Myron M. (See Cooley, Oliver & Sherwood.)					
205, 894	Oliver, Paul A., Wilkesbarre, Pa. Device for extracting keys	Apr. 16, 1878	643	188	13	696
209, 335	Oliver, Robert S., Albany, N. Y. Oven-shelf	July 9, 1878	477	{ 136 137 280 281 }	14	73
199, 989	Oliver, Robert S., assignor to Rathbone, Sard & Co., Albany, N. Y. Cooking-stove	Oct. 29, 1878	999	{ 280 281 }	14	642
209, 581	Oliver, Robert W., Richmond, Va. Plug-tobacco	Feb. 5, 1878	97	32	13	248
206, 964	Oliver, Robert W., and John E. Robinson, Richmond, Va. Method of affixing revenue-stamps to plug-tobacco	Nov. 5, 1878	45	13	14	687
198, 901	Olmstead, Chauncey L., West Brookfield, Mass. Corset	Aug. 13, 1878	327	100	14	250
202, 747	Olmstead, John A., Port Richmond, assignor of one-half interest to C. Meyer, New York, N. Y. Rubber overshoe	Jan. 1, 1878	186	52	13	87
210, 957	Olmstead, David, Charles L. Travis, and Charles R. Chute, assignors to George A. Brack-ett, Minneapolis, Minn. Grain-binder	Apr. 23, 1878	972	{ 219 280 179 }	13	746
204, 675	Olsen, Ole, Christiania, Norway. Portable tool-rest	Dec. 17, 1878	645	179	14	824
208, 419	Olsted, Christian, Boulder, Colo., assignor to Olsted Furnace Company. Furnace for desulphurizing ore	May 21, 1878	906	{ 239 200 }	13	954
209, 580	Olsted Furnace Company. (See Olsted, Christian, assignor.)					
200, 801	O'Meara, Jeremiah, New York, N. Y. Packing	Sept. 24, 1878	913	267	14	477
209, 580	Onderdonk, J. P. (See Scott, T. Seymour, assignor.)					
200, 801	O'Neill, James M., Fort Worth, Tex. Band-cutting feeder for thrashing-machine	Nov. 5, 1878	45	12	14	687
207, 619	O'Neill, Andrew, Baltimore, Md. Manufacture of copper and tinned-copper sheets	Feb. 26, 1878	940	.....	13	462
207, 619	O'Neill, Ellen. (See O'Neill, Thomas, assignor.)					
207, 619	O'Neill, Henry, assignor of one-third interest to Nettie Herzberg, New York, N. Y. Machine for shearing, punching, and stamping metals	Sept. 3, 1878	34	12	14	398

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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209, 418	O'Neill, Thomas, Jackson, Mich., assignor to Ellen O'Neill. Machine for double-seaming stove-boilers	Oct. 29, 1878	1062	308	14	652
	O'Neil, Henry, <i>et al.</i> (See Byrne, William, assignor.)					
206, 603	Onslow, Adolphe, Jersey City, N. J. Car-axle box	July 30, 1878	1304	375	14	189
206, 817	Oothoudt, Josiah, Minneapolis, Minn. Spring bed-bottom	Aug. 6, 1878	161	51	14	227
	Open Stove Ventilating Company. (See Lancaster, Joseph R., assignor.)					
	Open Stove Ventilating Company. (See Morgan, Alonzo R., assignor.)					
198, 751	Oppenheimer, Solomon, Newark, N. J. Latch and lock combined	Jan. 1, 1878	23	5, 6	13	12
	Opperman, Henry, <i>et al.</i> (See Mackey, Jacob, assignor.)					
	Orange Judd Company <i>et al.</i> (See Bausch, John J., assignor.)					
	Orchar, Robert. (See Martin, Dawson & Orchar.)					
208, 691	O'Regan, Timothy, Williamantic, Conn. Blind-slat retainer	Oct. 8, 1878	255	72	14	530
198, 954	Orendorf, Emma E., Delavan, Ill. Apple-corer	Jan. 8, 1878	244	70	13	53
	Orendorf, Mathias. (See Mallory, Charles Martin, assignor.)					
211, 040	Orphy, John W., assignor to C. T. Ham and F. D. W. Clarke, Rochester, N. Y. Lantern	Dec. 17, 1878	755	207	14	936
207, 202	Orran, William L., Morris Gap, Tenn. Endless-chain water-wheel	Aug. 20, 1878	579	174	14	286
207, 672	Orry, Jules Ernest, Paris, France. Manufacture of ornamental chains	Sept. 3, 1878	89	27	14	360
	Orsburn, Robert S. (See Keefer & Orsburn.)					
206, 191	Orser, Albert, assignor of two-thirds interest to Charles H. Payne and Hiram Oliver, Janesville, Wis. Trace-buckle	July 23, 1878	828	236	14	126
203, 189	Orth, Philip, Williamsport, Pa. Game-counter	Apr. 30, 1878	1438	420	13	810
205, 128	Otrlip, William H., Norristown, Pa. Fish-drain for casks	June 18, 1878	745	222	13	1118
203, 759	Ortmann, Charles James, and George Kampf, Whitesborough, N. Y. Curtain-roller	May 14, 1878	561	158	13	903
210, 431	Ortmeyer, Andrew, Chicago, Ill. Harness-saddle	Dec. 3, 1878	42	10	14	829
209, 707	Orton, Chauncey M., Glens Falls, N. Y. Kettle-cover	Nov. 5, 1878	184	54	14	705
207, 817	Orton, Thomas, Chicago, Ill. Bill and letter file	Sept. 10, 1878	247	77, 78	14	383
	Orum, Morris L. (See Mellor & Orum) (Reissue.)					
	Orwig, Arthur M. (See Platt & Orwig.)					
	Orwig, Thomas G. (See Handley & Orwig.)					
201, 800	Orwig, Thomas G., Des Moines, Iowa, assignor of three-fourths interest to Albert Snook, Oswego, Ill. Barbed fence-wire	Apr. 2, 1878	31	9	13	603
	Osborn, Beresford L. (See Alexander, Osborn & Anthony.)					
	Osborn, Charles H. (See Benstine & Osborn.)					
	Osborn, Charles S. (See Osborn, Edward and Charles S.)					
205, 806	Osborn, Edward and Charles S., Newton, N. J. Spark-arrester for locomotives	July 9, 1878	388	111	14	61
	Osborn, Matthias C. (See Smith & Osborn.)					
204, 242	Osborne, Alvah P., assignor to Ornan Osborne, Trumansburg, N. Y. Lawn-mower	May 28, 1878	1109	316	13	983
210, 625	Same same	Dec. 10, 1878	268	73	14	867
199, 096	Osborne, Don D., assignor of one-half interest to Warren Howard, Magnolia, Wis. Bed-bottom	Jan. 8, 1878	382	113	13	76
	Osborne, H. F. (See Selleck, Robert M., assignor.)					
	Osborne, Ornan. (See Osborne, Alvah P., assignor.)					
200, 565	Osborne, Theodore B., New York, N. Y. Lantern	Feb. 19, 1878	692	203	13	355
200, 928	Osborne, Thomas D., Louisville, Ky. Watchman's detector	Mar. 5, 1878	107	36	13	432
203, 490	Same Chromatic-printing block	May 7, 1878	267	77	13	857
199, 856	Osborne, Wilbur F., Ansonia, Conn. Buckle	Jan. 29, 1878	1188	349	13	217
207, 769	Same Manufacturing buckle-tongue	Sept. 3, 1878	188	57	14	373
	Osborne, William H. H., <i>et al.</i> (See Crowell, Solomon, assignor.)					
199, 990	Osburg, Frank X., Cincinnati, Ohio. Press for compressing cigars, &c., in packing-boxes	Feb. 5, 1878	97	32	13	248
200, 751	Osburn, Thomas Ferrier, Jerseyville, Ill. Sawing-machine	Feb. 26, 1878	903	206	13	395
8, 186	Osgood, Enoch, Boston, Mass., assignor, by mesne assignments, to Elliott P. Gleason, New York, N. Y. Rendering leather and other fibrous substances soft and flexible and impervious to gas, and composition for the same	Apr. 16, 1878	843		13	722
203, 760	Osgood, Galen N., Boston, Mass. Steam bell-ringer	May 14, 1878	561	159	13	903
210, 956	Same same	Dec. 17, 1878	644	178	14	924
201, 121	Osgood, George Albert, Stoneham, Mass. Heater for shoe-makers' tools for finishing soles	Mar. 12, 1878	307	94	13	468
	Osgood, H. H. (See Smith, Wesley, assignor.)					
	Osgood, Isaac. (See Brown & Osgood.)					
201, 625	Osgood, Napoleon B., Biddeford, Me. Reciprocating churn	Mar. 26, 1878	857	261	13	556
200, 664	Osgood, Nathaniel A., Battle Creek, Mich. Portable folding boat	Feb. 26, 1878	814	239	13	382
	Osgood, Ralph R. (See Park, James, assignor.)					
204, 502	Osselin, Eugene A., Paris, France, and Abraham Meyer, Syracuse, N. Y. Galvanic ring, bracelet, or necklace	June 4, 1878	77	26	13	1023
202, 188	Ostergard, James, Cherry Creek, Nev. Device for holding and counting coin	Apr. 9, 1878	355	104	13	653
208, 420	Ostrum, Henry P., New Haven, Conn. Ornamental wood-work	Sept. 24, 1878	914	267	14	477
204, 243	O'Sullivan, Jeremiah F., and Elias Bloom, Jackson, Miss. (said Bloom administrator for J. F. O'Sullivan, deceased). Mosquito-bar frame	May 28, 1878	1110	317	13	983
	Otis Brothers & Co. (See Schmidt, Rudolph, assignor.)					
205, 895	Otis, Charles R., Yonkers, N. Y. Hydraulic elevator	July 9, 1878	478	137	14	73
208, 489	Otis, Elbridge L., Rochelle, Ill. Governor for pumping-engines	Oct. 1, 1878	33	11	14	493
8, 419	Otis, Newton S., New York, N. Y., assignor, by mesne assignments, to William S. Gray and H. Mott Gray, trustee. Temporary binder	Sept. 17, 1878	694	204	14	446
207, 770	Otis, Samuel L., assignor to A. H. and C. B. Alling, Birmingham, Conn. Crochet-machine	Sept. 3, 1878	189	58	14	373
210, 224	O'Thayne, Patrick, New York, N. Y. Ironing-machine	Nov. 26, 1878	771	228	14	795
201, 698	Ottot, John D., Springfield, Ohio. Driving chain and pulley	Mar. 26, 1878	920	281	13	566
209, 505	Otten, John F., and Joseph Kluber, Cincinnati, Ohio. Apparatus for carbureting illuminating-gas	Oct. 29, 1878	1152	335	14	665
	Ottenheimer Brothers. (See Ottenheimer, Julius, assignor.)					
202, 044	Ottenheimer, Julius, assignor to Ottenheimer Brothers, New York, N. Y. Corset	Apr. 9, 1878	185	54	13	625
203, 665	Ottinger, Douglass, Erie, Pa. Fire-escape	Feb. 26, 1878	815	240	13	382
209, 773	Same same	Nov. 12, 1878	267	79	14	721
8, 107	Otto, Nicholas August, Deutz, Germany, Francis W. and William J. Crossley, Manchester, England. Gas-motor engine	Feb. 26, 1878	974	287, 288	13	406
202, 576	Otto, Robert, Cortland, N. Y. Oscillating chair	Apr. 16, 1878	778	224	13	714
210, 351	Otwell, Littleton M., Roswell, Ga. Plow and cultivator	Nov. 26, 1878	911	267	14	813
209, 287	Ougheltree, John L., Rondout, N. Y. Music-leaf turner	Oct. 23, 1878	916	267	14	628
200, 666	Oulten, George Franklin, Norfolk, Va. Bottle-stopper fastener	Feb. 26, 1878	815	240	13	382
200, 330	Ovenden, William C., Worcester, Mass. Bell-ringer for locomotives	Feb. 12, 1878	452	133	13	310
8, 241	Overbaugh, Abraham W., assignor to George R. Wight, New York, N. Y. Reservoir slate-cleaner	May 21, 1878	963	275	13	961
202, 748	Overfield, Nicholas, Rockaway Beach, N. Y. Portable bathing-house	Apr. 23, 1878	976	280	13	746



*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
204, 992	Overin, George P., and John H. Coldwell, New York, N. Y. Apparatus for working rattan.....	June 18, 1878	616	181	13	1100
203, 367	Overly, John O. (See Storle, Ole O., assignor.)..... (Reissue.)					
208, 629	Overshiner, James M., Elwood, and Thomas Shannon, Anderson, Ind. Washing-machine.....	May 7, 1878	138	40	13	839
200, 083	Overton, Charles C., Brooklyn, N. Y. Reversible dumping-scow.....	Oct. 1, 1878	175	51	14	512
200, 331	Oviatt, Frank L., Cleveland, Ohio. Cigar-support.....	Feb. 5, 1878	195	62	13	263
199, 221	Owen, Amanda, Williamsport, Pa. Medical compound.....	Feb. 12, 1878	452		13	310
200, 628	Owen, Edward W. (See Johnstry, Jacob A., assignor.).....					
200, 628	Owen, Ferdinand D., Joplin, Mo. Suppository.....	Jan. 15, 1878	524		13	96
200, 628	Owen, Humphrey, Quincy, Mass. Try-square.....	Feb. 26, 1878	772	227	13	375
201, 824	Owen, Joseph W. (See Philipps & Owen.).....					
201, 824	Owen, Silas R., and Frank M. Mahan, Saint Joseph, Mo. Vehicle-top.....	Mar. 26, 1878	1040	{ 320 321 }	13	585
206, 124	Same..... Atmospheric churn.....	July 16, 1878	737	211	14	110
206, 125	Same..... Felly joint and tightener.....	July 16, 1878	738	212	14	110
209, 072	Owens, Job E. (See Miller, Charles C., assignor.).....					
209, 506	Owens, Thomas, Washington, D. C. Ventilator.....	Oct. 15, 1878	685	198	14	501
209, 506	Same..... same.....	Oct. 29, 1878	1153	{ 335 336 }	14	665
206, 818	Oxenford, James, Kalamazoo, Mich. Plow-colter.....	Aug. 6, 1878	102	51, 52	14	227
201, 357	Oxley, John H., et al. (See Winters, Joseph R., assignor.).....					
205, 129	Pace, Beverly T., Salem, Ind. Swivel for watches and lockets.....	Mar. 19, 1878	509	175	13	512
206, 258	Packard, Fred, Brockton, Mass. Shoe or gaiter.....	June 18, 1878	747	222	13	1118
203, 491	Packer, Harvey, Sandwich, Ill. Corn-sheller.....	July 23, 1878	903	257	14	135
203, 640	Packer, William H. and Willard N., Cleveland, Ohio. Station-indicator.....	May 7, 1878	268	77	13	857
203, 640	Paddock, Miner H., East Clarkson, N. Y. Calendar-watch.....	May 14, 1878	432	124	13	887
204, 363	Paden, Joseph E. (See Brown & Paden.).....					
201, 442	Pagan, Orastes, Philadelphia, Pa. Railway-rail joint.....	May 28, 1878	1232	351	13	999
210, 432	Pago, Alanson S. (See Babcock, Darius, assignor.).....					
207, 771	Page, Caleb D., Greeley, Colo. Irrigating apparatus.....	Mar. 19, 1878	652	199	13	524
207, 771	Page, Charles. (See Cowan & Page.).....					
207, 773	Page, Daniel W., Chicago, Ill. Book-cover protector.....	Dec. 3, 1878	43	10	14	829
199, 567	Page, William Hamilton, Norwich, Conn. Sectional steam-boiler.....	Sept. 3, 1878	180	58	14	373
205, 205	Pagett, Charles William, Keokuk, Iowa. Curry-comb.....	Sept. 3, 1878	90	27	14	300
205, 205	Paige, David O., Detroit, Mich., assignor to Detroit Safe Company. Burglar-proof safe.....	Jan. 22, 1878	878	{ 257 258 }	13	162
205, 205	Paige, William H., Springfield, Mass. Street-car.....	June 25, 1878	844	250	13	1136
200, 920	Same..... Open railway-car.....	June 25, 1878	845	251	13	1136
203, 492	Paine, Edwin L., assignor to A. Allbright, Newark, N. J. Electro-magnet.....	Mar. 5, 1878	108	36	13	432
204, 166	Paine, Henry M., Newark, N. J., assignor to Daniel S. Robeson, Philadelphia, Pa. Electro-magnet.....	May 7, 1878	268	77	13	858
201, 553	Painter, Edward, Easthampton, Mass. Suspender-end.....	May 28, 1878	1026	262	13	973
202, 662	Paling, Thomas H., Woodstock, Ontario, Canada. Window-shade.....	Mar. 19, 1878	766	233	13	540
209, 952	Palliser, Edward. (See Parsons & Palliser.).....					
210, 142	Pallu, Eng., assignor to Société Anonyme des Seychelles, Paris, France. Treatment of cocoa-nut fiber for manufacture of various useful products.....	Apr. 23, 1878	887		13	735
209, 952	Palm, Charles, and Julius Fechteler, New York, N. Y. Process of producing transfer-pictures.....	Nov. 12, 1878	450		14	745
210, 142	Palmatier, Stanton, Leeds, assignor of one-half interest to Gelston Sanford, Brooklyn, N. Y. Vehicle-spring.....	Nov. 19, 1878	669	199	14	778
210, 553	Palmer, A. C. (See Thaxton, Parkham B., assignor.).....					
201, 941	Palmer, Ann, administratrix. (See Palmer, George T.).....					
202, 749	Palmer, Alfred J., Carlton, N. Y. Washer-cutter.....	Dec. 3, 1878	176	47	14	846
208, 923	Palmer, Augustus C. and Augustus H., Utica, N. Y. Telegraphic fire-alarm apparatus.....	Apr. 2, 1878	70	22	13	610
208, 923	Palmer, Augustus H. (See Palmer, Augustus C. and Augustus H.).....					
210, 554	Palmer, Charles, assignor to Edwin A. Hicks, Samuel D. Ogburn, George W. and Thomas K. Davis, Springfield, Tenn. Broom-sewing machine.....	Apr. 23, 1878	977	281	13	746
8, 070	Palmer, Charles H., jr., assignor of one-half interest to F. Augustus Doucet, Merrimac, Mass. Carriage.....	Oct. 15, 1878	517	150	14	569
207, 674	Palmer, Charles Henry, jr., Merrimac, Mass. Whiffletree-iron.....	Dec. 3, 1878	177	47	14	846
204, 599	Palmer, Charles W., Lynn, and Charles Houghton, Boston, Mass., assignors, by mesne assignments, to Merino Shoe Company. Felt shoe..... (Reissue.)	Feb. 5, 1878	232	71	13	289
204, 364	Palmer, Dennis W., Detroit, Me. Sulky-plow.....	Sept. 3, 1878	91	27	14	360
204, 364	Palmer, Frank D., New York, N. Y. Straw-braid-sewing machine.....	June 4, 1878	171	55	13	1037
204, 755	Palmer, Franklin G., assignor of one-half interest to Jason J. Palmer, Philadelphia, Pa. Lamp.....	May 28, 1878	1233	351	13	999
208, 330	Palmer, George E., Cedar Rapids, Iowa. Ironing-board.....	June 11, 1878	343	104	13	1063
202, 663	Palmer, George Farrer, Rochester, N. H. Hose-nozzle.....	Sept. 24, 1878	822	240	14	465
199, 097	Palmer, George H., Monmouth, Ill. Military accoutrement.....	Apr. 23, 1878	888	255	13	736
8, 235	Palmer, George T. (Ann Palmer, administratrix), assignor to James Palmer, Brooklyn, N. Y. Child's carriage.....	Jan. 8, 1878	362	114	13	76
207, 545	Palmer, Gideon G. (See Searle & Palmer.).....					
210, 803	Palmer, Isaac H., Lodi, Wis. Wind-engine..... (Reissue.)	May 14, 1878	628	175	13	910
200, 930	Same..... same.....	Aug. 27, 1878	955	279	14	338
201, 042	Same..... Windmill mill.....	Dec. 10, 1878	452	127	14	891
206, 965	Palmer, Jacob Addison, Noble, Ill. Animal-trap.....	Mar. 5, 1878	109	37	13	432
200, 084	Palmer, James. (See Palmer, George T., assignor.).....					
202, 577	Palmer, James M., Cambridge, and Charles A. Shaw, Salem, Mass. Loom-shuttle.....	Dec. 17, 1878	542	153	14	911
202, 577	Palmer, Jacob, Orr, Minn. Bee-hive.....	Feb. 5, 1878	190	62	13	263
205, 498	Palmer, Jason J. (See Palmer, Franklin G., assignor.).....					
205, 294	Palmer, John W., Port Republic, assignor of one-half interest to George W. Berlin, Harrisonburg, Va. Pump.....	Apr. 16, 1878	779	224	13	714
198, 810	Palmer, Nelson, New York, N. Y. Rotary mold-board plow.....	July 2, 1878	35	11	14	13
201, 042	Palmer, Samuel M., Glens Falls, N. Y. Horse-collar.....	June 25, 1878	937	278	13	1148
206, 965	Palmer, Theodore J., New York, N. Y. Rocking-chair.....	Jan. 1, 1878	92	25	13	23
206, 402	Palmer, W. L. (See Winn & Bliss, assignors.).....					
201, 628	Palmer, William Henry, Warren, Pa. Folding-table.....	Mar. 5, 1878	223	70	13	449
203, 493	Palmer, Winfield, Scott, Glenburn, Pa. Thill-coupling.....	Aug. 13, 1878	328	100	14	250
206, 747	Paquelin, Claude André, Paris, France. Combusting apparatus.....	July 30, 1878	1092	312	14	183
206, 747	Paquet, Anthony C., Philadelphia, Pa. Machine for stamping letters.....	Mar. 26, 1878	858	261	13	526
206, 747	Paradine, Thomas Joseph, Erie, Pa. Safety-valve and cock for steam-cylinders.....	May 7, 1878	269	77	13	857
206, 747	Paradis, Joseph, Quebec, assignor to self and Iodoin & Co., Montreal, Canada. Manufacture of shovels and spades.....	Aug. 6, 1878	91	29	14	218

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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200, 332	Pardessus, Semon J., Brooklyn, N. Y. Ventilating-skylight .....	Feb. 12, 1878	453	134	13	310
201, 356	Paré, Louis, Detroit, Mich. Hatchway .....	Mar. 19, 1878	568	{ 174 175 }	13	512
	Parent, Charles E. (See Adgate, Joseph J., assignor.) .....					
	Paret, John F. (See Ross, Thomas J., assignor.) .....					
	Paris, Daniel E. (See Luchs, Hannah, assignor.) .....					
	Same..... (See White, Thomas, assignor.) .....					
8, 336	Paris, Daniel E., Omaha, Nebr. Parlor-stove .....	July 16, 1878	782	224	14	116
207, 297	Same..... Cooking-stove .....	Aug. 20, 1878	675	201	14	298
	Parish, Alfred. (See Stokes, Samuel E., jr., assignor.) .....					
207, 298	Park, Horace, Kenton, Ohio. Heating attachment for steam-boilers .....	Aug. 20, 1878	676	201	14	298
204, 076	Park, James, assignor of one-half interest to Ralph R. Osgood, Troy, N. Y. Composi- tion for tempering, lubricating, &c .....	May 21, 1878	908	.....	13	955
200, 931	Park, Jesse Warren, Columbia, Tex. Bee-hive .....	Mar. 5, 1878	109	37	13	432
201, 699	Park, William R., Boston, Mass. Regulating-cock .....	Mar. 26, 1878	921	282	13	566
204, 448	Park, William R., Philadelphia, Pa. Hydrocarbon-gas lamp .....	June 4, 1878	33	11	13	1017
203, 937	Parke, Ira, Mineral Point, Mo. Bee-hive .....	May 21, 1878	758	218	13	936
205, 896	Parker, Andrew H., Chicago, Ill. Truss .....	July 9, 1878	479	137	14	73
	Parker Company, Charles. (See Camp, Nelson H., assignor.) .....					
	Parker, Delos Jay. (See Stuart & Parker.) .....					
206, 605	Parker, Emery, assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Fastening porcelain and other knobs to their shanks .....	July 30, 1878	1307	376	14	189
210, 221	Parker, Emery, New Britain, and Horace K. Jones, Hartford, assignors to Russell & Erwin Manufacturing Company, New Britain, Conn. Chuck for metal-screw machine .....	Nov. 26, 1878	767	228	14	794
	Parker, Gustavus W. (See Stanwood & Parker.) .....					
202, 957	Parker, Harrison, Winchester, Mass. Wood-drying apparatus .....	Apr. 30, 1878	1208	349	13	780
198, 752	Parker, Hugh, Ottawa, Ill. Gopher or ridging attachment for cultivators .....	Jan. 1, 1878	24	6	13	12
	Parker, Ira, et al. (See Parker, Lewis H., assignor.) .....					
208, 331	Parker, James, Detroit, Mich. Guard for car-axle boxes .....	Sept. 24, 1878	822	241	14	466
205, 499	Parker, James R., Wayne Township, Ashtabula County, Ohio. Organ-action .....	July 2, 1878	35	12	14	13
	Parker, Jasper J. A. (See Goodrich & Parker.) .....					
8, 191	Parker, Jerome M., Leicester, Mass., assignor to Loom Picker Company. Loom-picker. (Reissue) .....	Apr. 23, 1878	1156	332	13	769
	Parker, Joseph. (See Scranton, Worthington, assignor.) .....					
200, 472	Parker, Joseph N., Augusta, Me. Cheese-cutter .....	Feb. 19, 1878	601	177	13	341
208, 197	Parker, Joseph Newell, assignor to self and Solon S. Gould, Vineland, N. J. Hoe .....	Sept. 17, 1878	664	195	14	442
205, 207	Parker, Lewis H., assignor of one-half interest to Ira Parker, Littleton, N. H., George M. Glazier and Charles T. Lincoln, Boston, Mass. Combined buttoner and button- fastener .....	June 25, 1878	846	251	13	1136
205, 760	Parker, M. A. (See Moodie, Elhanan L., assignor.) .....					
	Parker, Moses S., Lowell, Mass. Process of producing and maintaining a high degree of heat by hydrocarbon-vapor blast on heated metallic salt sponge, and mode of pre- paring the heating-case .....	July 9, 1878	335	97	14	55
	Parker, Riley H. (See Wilson, George C., assignor.) .....					
199, 738	Parker, Samuel J. (See Ross & Parker.) .....					
201, 443	Parker, S. Oscar, Littleton, N. H. Glove .....	Jan. 29, 1878	1077	315	13	200
202, 956	Parker, Thomas S., Cohoes, N. Y. Hypodermic syringe .....	Mar. 19, 1878	653	199	13	524
205, 409	Parker, Wesley M., Rushville, Ill. Metal-lath machine .....	Apr. 30, 1878	1206	348	13	779
205, 974	Parker, William M., and Wilford W. Yokom, Parkersburg, Iowa. Feed-steamer .....	June 25, 1878	1057	314	13	1163
	Parkhurst, Edward B., Woburn, Mass. Machine for stoning, glassing, and pebbling leather .....	July 16, 1878	580	166	14	91
	Parkhurst, Emily R. (See Parkhurst, Stephen R. and Emily R.) .....					
204, 503	Parkhurst, Stephen R., assignor to Emily R. Parkhurst, Mont Clair, N. J. Wool-wash- ing machine .....	June 4, 1878	77	27	13	1023
203, 190	Parkin, William, assignor to Reed & Barton, Taunton, Mass. Beverage-holder for table use .....	Apr. 30, 1878	1439	421	13	810
206, 906	Parkin, William Henry, Good Hope, Ill. End-gate for wagons .....	Aug. 13, 1878	328	100	14	250
	Parkinson, Joseph. (See Morrell & Parkinson.) .....					
	Parkinson, Thomas. (See Morrell & Parkinson.) .....					
209, 582	Parks, Dana, assignor to Henry Smith, Boston, Mass. Suspended ship's berth .....	Nov. 5, 1878	46	13	14	687
207, 131	Parks, Daniel, Trumbull, Conn. Attachment for securing caps or covers to cans .....	Aug. 20, 1878	507	153	14	277
209, 831	Parks, John T., Ellingham, Ill. Nut-lock .....	Nov. 12, 1878	326	97	14	728
	Parks, Warren L. (See Davis, William S., assignor.) .....					
206, 403	Parks, William, and George M. Allen, Fort Atkinson, Wis. Hot-air radiator .....	July 30, 1878	1094	313	14	163
	Parlin & Orendorff. (See Parlin, William H., assignor.) .....					
199, 930	Parlin, William H., assignor to Parlin & Orendorff, Canton, Ill. Sulky-plows .....	Feb. 5, 1878	43	14	13	239
208, 332	Parmalee, John S., Cleveland, Ohio. Barrel-filler .....	Sept. 24, 1878	823	241	14	466
206, 477	Parmalee, Dubois D., New York, assignor to John Chapman, Brooklyn, N. Y. Appa- ratus for manufacture of carbon-bisulphide .....	July 30, 1878	1169	{ 335 336 }	14	173
	Parmalee, Edward W. (See Bates, Edward P., assignor.) .....					
205, 975	Parmalee, Edwin S., and Bryan A. Treat, Naugatuck, Conn. Vehicle-hub .....	July 16, 1878	581	166	14	91
8, 376	Parmalee, Henry S., New Haven, Conn. Fire-extinguisher .....	Aug. 13, 1878	470	142	14	268
205, 672	Same..... same .....	July 12, 1878	222	66	14	37
207, 620	Parmalee, Julius, Des Moines, Iowa. Hollow-screw pin-vise .....	Sept. 3, 1878	35	12	14	353
205, 130	Parmenter, Charles O., Amherst, Mass. Manufacture of hats and caps from straw braid .....	June 18, 1878	747	222	13	1118
	Parmenter, Jennie T., et al. (See Parmenter, Orville L., assignor.) .....					
205, 897	Parmenter, Orville L., assignor to Jennie T. Parmenter, South Evanston, and Seneca D. Kimbark, Chicago, Ill. Paper pocket for cigars .....	July 9, 1878	481	137	14	73
205, 898	Same..... Egg and fruit carrier .....	July 9, 1878	483	138	14	73
	Parmilee, David H., et al. (See Speer, David F., assignor.) .....					
203, 849	Parnell, Edward A., Swansea, Wales. Treating ores of zinc .....	May 21, 1878	668	.....	13	924
203, 555	Parnell, Edward W., assignor of one-half interest to James Simpson, Liverpool, Eng- land. Apparatus for the manufacture of caustic alkalies .....	May 14, 1878	358	101	13	877
203, 761	Parnell, Edward W., assignor to James Simpson, Liverpool, England. Manufacture of caustic alkalies .....	May 14, 1878	562	.....	13	903
205, 131	Parr, Oliver G., Newark, Ohio. Grate-extension .....	June 18, 1878	748	222	13	1118
199, 462	Parrett, Richard Jefferson, Albany, Ind. Carpet-stretcher .....	Jan. 22, 1878	771	226	13	144
200, 932	Parrish, John Edward, Centreville, La. Tool-handle .....	Mar. 5, 1878	110	37	13	432
209, 708	Parrott, Peter, Red Bud, Ill. Thrashing-machine .....	Nov. 5, 1878	184	54, 55	14	705
199, 857	Parry, Henry, Milwaukee, Wis. Tilting chair .....	Jan. 29, 1878	1189	349	13	217
208, 630	Parry, Joseph L., Philadelphia, Pa. Steam-trap .....	Oct. 1, 1878	176	51	14	512
	Parshall, Leroy L. (See Darling, Parshall & Wendell.) .....					
201, 283	Parsons, Charles C., New York, N. Y. Composition for crayons .....	Mar. 12, 1878	473	.....	13	492
210, 208	Parsons, Charles Chauncy, New York, N. Y. Detergents .....	Nov. 26, 1878	754	.....	14	793

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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207, 299	Parsons, Charles H., Boston, Mass. Sad-iron .....	Aug. 20, 1878	677	{ 201	14	293
202, 285	Parsons, Francis W., Cleveland, Ohio. Wash-board .....	Apr. 9, 1878	453	{ 202		667
202, 665	Parsons, George W., <i>et al.</i> (See Hall, Cassius L., assignor.) (Reissue.)			132	13	
202, 665	Parsons, Henry F., New York, assignor to self and Martha J. Dodge, Brooklyn, N. Y. Velocipede .....	Apr. 23, 1878	801	255	13	736
206, 604	Parsons, John H. (See Gay, George E., assignor.)					
206, 604	Parsons, J. Russell. (See Curtis, Henry, assignor.)					
206, 895	Parsons, Perceval M., Melbourne House, Blackheath, England. Manufacture of copper alloys containing manganese .....	July 30, 1878	1305	.....	14	189
207, 436	Parsons, Richard Clere, Connaught Place, and Edward Palliser, Charleville Road, Kensington, England. Apparatus for working punkahas .....	Aug. 13, 1878	265	81	14	243
207, 436	Parsons, Samuel W., <i>et al.</i> (See Hall, Cassius L., assignor.) (Reissue.)					
200, 566	Parsons, Schuyler S., Francis R. Shaw, and George N. Daniels, Chatham Centre, Ohio. Mechanical telephone .....	Aug. 27, 1878	831	246	14	323
199, 463	Partridge, Edwin F., assignor to John Mundell & Co., Philadelphia, Pa. Shoe-tip .....	Feb. 19, 1878	692	204	13	355
206, 748	Partridge, Esther E. (See Partridge, John W., assignor.)					
209, 709	Partridge, Horace. (See Ireland, George H., assignor.)					
206, 748	Partridge, John W., Boston, assignor to Esther E. Partridge, Brookline, Mass. Back and shoulder brace .....	Jan. 23, 1878	772	226	13	145
209, 709	Pascual, Richard T., New York, N. Y. Steam-trap .....	Aug. 6, 1878	91	29	14	213
204, 600	Paschal, James Howze, Camden, Ark. Wagon-body .....	Nov. 5, 1878	186	55	14	706
209, 507	Paschal, Lesme. (See Deeley & Turl, assignors.)					
199, 662	Passoo, Lew, assignor to Munroe M. Cady, Dubuque, Iowa. Knock-down barrel .....	June 4, 1878	173	56	13	1037
202, 578	Patch, George H., Stevens Point, Wis. Double-acting force-pump .....	Oct. 29, 1878	1155	336	14	665
209, 510	Pate, Theodore H., assignor of one-half interest to Hamilton Badus and Z. Smith Knickerbocker, Wayne, Mich. Thrill-coupling .....	Jan. 29, 1878	1007	293	13	189
204, 365	Patee, Theodoros H., Boonville, Mo. Machine for making lightning-rods .....	Apr. 16, 1878	780	225	13	714
208, 262	Paterson, Swan, Knoxville, Ill. Pump .....	Oct. 29, 1878	1160	337	14	666
200, 685	Patric, Charles E., Springfield, Ohio. Spring-hoe for grain-drills .....	May 28, 1878	1234	351	13	999
204, 077	Patrick, William R., assignor of one-half interest to Andrew C. Merryman, Marinette, Wis. Obtaining fiber from wood for paper-pulp .....	Sept. 24, 1878	754	221	14	456
199, 858	Patrick, William R., Marinette, Wis. Rotary grinding-machine for the manufacture of paper-pulps from wood .....	Feb. 5, 1878	197	.....	13	264
209, 832	Pattberg & Brothers, Lewis. (See Pattberg & Gaertner, assignors.)					
201, 627	Pattberg, Hilarius, Jersey City Heights, N. J., and Adolph Gaertner, New York, assignors to Lewis Pattberg & Brothers, New York, N. Y. Automatic toy .....	May 21, 1878	909	260	13	955
207, 621	Pattberg, Hilarius, Jersey City Heights, N. J. Picture-frame .....	Jan. 29, 1878	1190	349	13	217
207, 203	Pattee, Davis, Des Moines, Iowa. Corn-cultivator .....	Nov. 12, 1878	327	97	14	728
199, 859	Pattee, James M. (See Carvalho, Solomon N., assignor.)	Mar. 26, 1878	859	262	13	557
205, 899	Patten, George M., Yonkers, N. Y. Child's convertible chair .....	Sept. 3, 1878	36	12	14	354
203, 763	Patten, John, Tomales, Cal. Harness-saddle .....	Aug. 20, 1878	580	174	14	286
202, 045	Pattengill, Horace, Schoolcraft, Mich. Composition for slate .....	Jan. 29, 1878	1191	.....	13	217
204, 366	Pattengill, Horace, Schoolcraft, Mich. Vehicle-axle lubricator .....	July 9, 1878	484	138	14	74
208, 986	Patterson, Abram A., Corinne, Utah. Umbrella-support .....	Oct. 22, 1878	824	238	14	615
202, 958	Patterson, Charles E., Covington Township, Tioga County, Pa. Calculating-machine .....	May 14, 1878	564	159	13	903
203, 762	Patterson, Charles H., <i>et al.</i> (See Barber, Oliver P., assignor.)					
210, 958	Patterson, Charlton, Rock Island, Ill. Post-hole digger .....	Oct. 8, 1878	329	93	14	540
205, 500	Patterson, Elias C., Rochester, N. Y. Dust-brush .....	Apr. 2, 1878	186	54	13	625
208, 116	Patterson, J. M. (See McConnell, Edward, assignor.)					
200, 752	Patterson, Jerome, and Norton Wheeler, Sharon, Pa. Burial apparatus .....	May 28, 1878	1235	351	13	999
209, 508	Patterson, John, assignor to self and George F. Martin, Salem, Mass. Valve .....	Oct. 15, 1878	582	169	14	578
208, 115	Patterson, John S. (See Griffith & Patterson) (Reissue.)					
203, 762	Patterson, Lemuel, assignor of one-third interest to Samuel H. Croyle, Parker City, Pa. Hinge .....	Apr. 30, 1878	1209	349	13	780
210, 958	Patterson, Lewis, Terre Haute, Ind. Grinding-machine .....	May 14, 1878	563	159	13	903
205, 500	Patterson, Robert Love, Belle Plaine, Kans. Seed-dropping attachment for corn-planters .....	Dec. 17, 1878	646	179	14	904
208, 116	Patterson, Thomas Law. (See Walker & Patterson.)					
200, 752	Pattison, William, Constantine, Mich. Clothes-washer .....	July 2, 1878	37	12	14	14
209, 508	Pattison, William W., assignor of one-half interest to John B. Harris and Walter J. Davenport, Corning, Iowa. Car-brake .....	Sept. 17, 1878	577	172	14	431
208, 115	Pattison, William N., assignor of one-third interest to E. M. Drane, Frankfort, Ky. Car-coupling .....	Feb. 26, 1878	904	266	13	395
205, 673	Pattillo, Robert M., Cartersville, Ga. Cotton-seed planter .....	Oct. 29, 1878	1156	336	14	666
201, 629	Pattin, Richard, Marietta, Ohio. Breast-collar for harness .....	Sept. 17, 1878	576	172	14	431
203, 764	Pattin, William. (See Bogenrief & Pattison.)					
206, 606	Patton, John N. (See Johnson, Charles C., assignor.)					
204, 993	Patton, Thomas, Philadelphia, Pa. Apparatus for cleaning garments .....	July 2, 1878	224	66	14	37
201, 585	Paul, Archibald, assignor of one-half interest to Campbell & Clute, Cohoes, N. Y. Yarn-delivery attachment for knitting-machines .....	Mar. 26, 1878	861	262	13	557
203, 764	Paul, George D., assignor of one-half interest to Parker P. Paul, New York, N. Y. Last-block fastener .....	May 14, 1878	566	159	13	903
206, 606	Paul, Harry B., assignor of one-half interest to Charles S. Caffrey, Camden, N. J. Trotting-sulky .....	July 30, 1878	1308	376	14	189
204, 993	Paul, John, La Crosse, Wis. Log-slide .....	June 18, 1878	617	181	13	1100
201, 585	Paul, John C., Swisssvale, Pa. Railway-car .....	Mar. 10, 1878	803	245	13	544
206, 478	Paul, Parker P. (See Paul, George D., assignor.)					
208, 421	Paul, Simon. (See Bayrd & Paul.)					
208, 422	Paul, Archibald W. (See Walton & Paul.)					
209, 188	Paul, Archibald W., Wheeling, W. Va. Lantern .....	July 30, 1878	1172	336	14	173
203, 066	Paul, Archibald W. and Joseph F., Wheeling, W. Va. Lantern .....	Sept. 24, 1878	915	{ 267	14	477
208, 422	Paul, Archibald W., Wheeling, W. Va. Lantern .....	Sept. 24, 1878	918	{ 268		477
209, 188	Paul, Archibald W., Wheeling, W. Va. Lantern .....	Oct. 22, 1878	825	238	14	615
203, 066	Paul, George T. (See Sprout, Ariel B., assignor.)					
198, 902	Paul, Joseph F. (See Paul, Archibald W. and Joseph F.)					
203, 066	Paulson, Leonard, New York, N. Y. Combined vest and suspender .....	Apr. 30, 1878	1310	380	13	793
203, 066	Paup, Martin. (See Van Tassel & Paup.)					
203, 066	Payne, Charles H., <i>et al.</i> (See Orser, Albert, assignor.)					
203, 066	Payne, D. R. (See Cole, William A., assignor.)					
203, 066	Payne, Joseph Mott, Dallas, Tex. Plow .....	Jan. 1, 1878	186	52	13	37

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
203, 938	Payne & Sons, B. W. ( <i>See</i> Tabor, Harris, assignor.)	May 21, 1878	759	219	13	936
207, 204	Payne, William Clark, Clinton City, Iowa. Wire fence	Aug. 20, 1878	581	174	14	286
208, 263	Payson, Calvin B., <i>et al.</i> ( <i>See</i> Beckett, John R., assignor.) (Reissue.)	Sept. 24, 1878	755	221	14	457
199, 098	Payson, Calvin B., and Charles H. Fowler, Boston, Mass. Ice-tongs	Jan. 8, 1878	384	114	13	76
209, 918	Payson, Darius N., <i>et al.</i> ( <i>See</i> Beckett, John R., assignor.) (Reissue.)	Nov. 12, 1878	413	124	14	740
208, 924	Payson, Joseph Rowe, Chicago, Ill. Joist-shoe	Oct. 15, 1878	518	150	14	569
8, 396	Peabody, Henry Adams, Sacramento, Cal. Copy-holder	Sept. 3, 1878	216	66	14	376
	Peacock, Job F., Reno, Nev. Door-knob attachment	Apr. 16, 1878	644	188	13	698
	Peall, William A. ( <i>See</i> Jones, John E., assignor.)	Mar. 19, 1878	768	224	13	540
202, 458	Pearce, David H., and Alanson W. Taft, Providence, R. I., assignors of one-half interest to Samuel W. Bennett and Alfred G. Pierce. Center rim for watch-cases. (Reissue.)	Mar. 5, 1878	224	70	13	449
201, 555	Pearce, David H., and Alanson W. Taft, Providence, R. I. Center rim for watch-cases	Aug. 6, 1878	163	52	14	227
201, 043	Pearce, Frank I., Chicago, Ill. Boiler-due cleaner	Oct. 1, 1878	81	24	14	500
206, 819	Pearce, George W., Philadelphia, Pa. Child's carriage	Oct. 8, 1878	423	123	14	553
208, 536	Pearce, Washington C. ( <i>See</i> Booth, Robert J., assignor.)	Feb. 19, 1878	535	158	13	331
208, 843	Pearl, Adolph, New York, N. Y. Cigarette	May 7, 1878	60	18	13	828
260, 406	Pearlsall, G. Frank E., Brooklyn, assignor to E. & H. T. Anthony & Co., New York, N. Y. Photographic-printing frame	Apr. 30, 1878	1209	349	13	780
203, 290	Pearse, Marcus C., Tabor, Iowa. Corn-husking implement	Apr. 20, 1878	679	202	14	299
202, 959	Pearson, Alonzo B., Saint Louis, Mo. Platform scales	Sept. 10, 1878	425	128	14	406
207, 300	Same. Scale-beam	Dec. 17, 1878	647	179	14	924
207, 979	Pearson, Francis W., Boston, Mass., assignor to self and Amasa Mason, New York, N. Y. Book-support	Mar. 10, 1878	767	233	13	540
210, 950	Pearson, Henry G., New York, N. Y. Coin-holder	Feb. 6, 1878	98	32	13	249
201, 554	Same. Mailing-package	Feb. 5, 1878	198	62	13	264
199, 991	Same. Metallic postal-envelope	Oct. 29, 1878	1063	309	14	652
200, 086	Pearson, John W., Des Moines, Iowa. Harrow	Apr. 23, 1878	970	281	13	747
	Pearson, Marshall Henry, Leeds, England. Waxing device for sewing-machines	Apr. 16, 1878	781	225	13	714
209, 410	Pearson, Robert P., Philadelphia, Pa., assignor, by mesne assignment, to Dutcher Temple Company, Milford, Mass. Loom-temple	July 23, 1878	1021	292	14	150
02, 750	Pearson, William Fletcher, Houma, La. Balloon	June 25, 1878	938	278	13	1148
202, 579	Pease, Claudius A., Boston, Mass. Carpet-lining	Dec. 3, 1878	79	20	14	834
206, 354	Peberdy, Samuel, Philadelphia, Pa. Knitting-machine needle	Sept. 3, 1878	92	28	14	300
205, 295	Peck, Charles C., Chicago, Ill., and Robert R. Ball, West Meriden, Conn. Milk-cooler	Nov. 5, 1878	187	55	14	706
210, 405	Peck, Charles C., Melrose, Mass. Amalgamator	Feb. 5, 1878	99	33	13	249
207, 675	Peck, Charles Fletcher, Georgetown, D. C. Conductor's fare-controller	Sept. 17, 1878	577	172	14	431
209, 710	Peck, Charles Q., Pittsfield, Mass. Sifter	Sept. 17, 1878	578	172	14	431
199, 092	Peck, George S., Towanda, Pa. Mower	July 16, 1878	738	212	14	110
208, 117	Peck, George W., Roselle, N. J. Can for oils and other liquids	Nov. 12, 1878	414	124	14	740
208, 118	Same. Can for liquids	Aug. 27, 1878	760	227	14	314
206, 126	Peck, J. W. ( <i>See</i> Schwerdt, Solomon, assignor.)	July 2, 1878	38	12	14	14
	Peck, Lewin A., Boston, Mass. Apparatus for projecting life-saving lines, &c	Nov. 12, 1878	267	79	14	721
	Peck, Stow & Wilcox Company. ( <i>See</i> Shepard, Amos, assignor.)	Nov. 26, 1878	912	267	14	813
209, 919	Same. ( <i>See</i> Stow, Enos E., assignor.)	June 11, 1878	344	105	13	1063
	Peckham, William C., and David F. McKetrick, Troy, Ohio. Device for pulling off boots and shoes	June 25, 1878	938	279	13	1148
	Pedder, J. ( <i>See</i> Bergmann, John, assignor.)	Apr. 30, 1878	1311	381	13	793
207, 367	Pedder, John. ( <i>See</i> Abel & Pedder.)	July 30, 1878	1174	336	14	173
205, 501	Pedder, John, Beaver Falls, Pa. Machine for rolling hoes, picks, &c	Jan. 15, 1878	656	192	13	118
209, 774	Pederson, Ole, Joliet, Ill. Barbed fence-wire	May 7, 1878	139	40	13	839
210, 352	Same. Screw-cutting die	Sept. 24, 1878	756	221	14	457
204, 756	Peebles, David Bruce, Edinburgh, Scotland. Governing and recording apparatus for gas	May 14, 1878	436	133	13	887
205, 296	Peer, John A., San Francisco, assignor of one-half interest to Rufus Smith, Oakland, Cal. Gear-cutting machine	Apr. 30, 1878	1311	381	13	793
203, 067	Same. Cutting instrument or tool	Feb. 12, 1878	454	134	13	310
206, 479	Peer, Perry A., Comstock, Mich. Fanning-mill	Oct. 1, 1878	177	51	14	512
	Peerless Brick Company. ( <i>See</i> Adams, Thomas F., assignor.)	July 9, 1878	484	138	14	74
	Peet, John T., assignor to Redway & Burton, Cincinnati, Ohio. Turn-table for stoves	Nov. 26, 1878	961	280	14	819
	Peet, William, administrator. ( <i>See</i> Hyde, James S.) (Reissue.)	May 21, 1878	910	260	13	955
8, 042	Peiffer, William A. ( <i>See</i> Foster, Francis M., assignor.)	Aug. 27, 1878	831	246	14	323
	Peiffer, Cordelia H., <i>et al.</i> ( <i>See</i> Peiffer & Richards, assignors) (Reissue.)	Apr. 10, 1878	559	163	13	685
203, 368	Peiffer, Josiah, and Samuel Richards, Valonia, Pa., assignors, by mesne assignments, to said Josiah Peiffer, Cordelia H. Peiffer, and Henry C. Johnson. Apparatus for aging whisky and other spirits	July 23, 1878	829	237	14	126
208, 264	Peirce, Edward B., Lowell, Mass. Game-board	Nov. 26, 1878	768	228	14	794
203, 641	Peirce, Isaac Newton, Philadelphia, Pa. Non-conducting covering for steam-boilers	Apr. 2, 1878	80	23	13	610
203, 068	Peiter, Theodore, New York, N. Y. Art of cutting precious stones, shells, &c	May 28, 1878	1110	340	13	984
200, 333	Pekár, Emmerich, Budapest, Hungary. Testing flour	Apr. 30, 1878	1311	381	13	793
	Pell, Henry W., Rome, N. Y. Vehicle-spring	Feb. 12, 1878	454	134	13	310
208, 631	Pellerin, Hector. ( <i>See</i> Pellerin, Joseph Isaac and Hector.)	Oct. 1, 1878	177	51	14	512
205, 900	Pellerin, Joseph Isaac and Hector, Montreal, Quebec, Canada. Trimmer for wax-thread sewing-machines	July 9, 1878	484	138	14	74
8, 507	Pelphrey, John A., Lowmanville, Ky. Windlass	Nov. 26, 1878	961	280	14	819
204, 078	Pelstring, George, Cincinnati, Ohio. Graining-machine	May 21, 1878	910	260	13	955
	Same. same	Aug. 27, 1878	831	246	14	323
207, 437	Pelton, Florentine W., <i>et al.</i> ( <i>See</i> Huston, David, assignor.)	Apr. 10, 1878	559	163	13	685
202, 370	Pemble, Robert, sr., and Robert, jr., Cerro Gordo, Ill. Device for catching and holding hogs	July 23, 1878	829	237	14	126
206, 192	Pendleton, Frank P., Philadelphia, Pa. Wire clothing for burring and other cylinders	Nov. 26, 1878	768	228	14	794
210, 222	Pendleton, Frank P., Philadelphia, Pa. Toothed cylinder for working cotton, wool, &c	Apr. 2, 1878	80	23	13	610
201, 942	Penfield, Charles W., assignor to P. and F. Corbin, New Britain, Conn. Saab-fastener	May 28, 1878	1110	340	13	984
204, 244	Penissat, André, Clearmont-Ferrand, France, assignor to self and William H. Nichols, Brooklyn, N. Y. Recovering waste sulphuric acid	Apr. 30, 1878	1311	381	13	793
202, 960	Penland, N. Alexander, Asheville, N. C. Ventilator	July 16, 1878	582	166	14	91
205, 976	Penn, Benjamin F., Carlisle, Ohio. Mechanical movement	Dec. 12, 1878	474	145	13	492
201, 284	Pennell, Oscar J., Williamsport, Pa. Chisel	Dec. 10, 1878	349	96	14	878
210, 706	Pennney, James, Stockport, Great Britain. Machine for tapping mains	Apr. 30, 1878	1312	381	13	793
203, 069	Pennington, Aaron S., and Eugene Beggs, Paterson, N. J. Sprinkler					

*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
210, 555	Pennington, Aaron S., Paterson, N. J. Tool-handle .....	Dec. 3, 1878	178	47	14	846
200, 474	Pennington, James Jackson, Henryville, Tenn. Wagon gear and brake .....	Feb. 19, 1878	603	177	13	342
205, 807	Pennington, Susan M. H., Evansville, Ind. Coloring photographs .....	July 9, 1878	389	14	62	
200, 334	Pennock, Isaac N. and Willard, Minerva, Ohio. Combined tire-upsetter and shears .....	Feb. 12, 1878	454	134	13	310
	Pennock, Willard. (See Pennock, Isaac N. and Willard.) .....					
205, 674	Pennsylvania Steel Company. (See Richardson, John T., assignor.) .....					
	Pennypacker, Matthias, Philadelphia, Pa. Hydraulic jack .....	July 2, 1878	224	67	14	37
	Pennypacker, William G. (See Huston & Wickersham, assignors.) .....					
	Penrose, Clement B., et al. (See Lauga, Charles, assignor.) .....					
	Penrose, George B., et al. (See Lauga, Charles, assignor.) .....					
208, 844	Penrose, Thomas, Chicago, Ill. Horseshoe .....	Oct. 8, 1878	424	123	14	553
201, 285	Pentlarge, Rafael, Brooklyn, N. Y. Machine for turning bungs .....	Mar. 12, 1878	474	145	13	492
205, 410	Pentreath, John, and John Q. Crosby, Newark, N. J., assignor to New York Plow Company, New York, N. Y. Harrow .....	June 25, 1878	1059	314	13	1164
209, 298	Peppler, John C., Columbus, Ohio. Hitching-post .....	Oct. 22, 1878	917	268	14	628
198, 811	Percival, Thomas, Napanock, N. Y. Door-latch .....	Jan. 1, 1878	92	25	13	22
199, 312	Perkins, Charles Henry, Bloomington, Ill. Pipe-coupling .....	Jan. 15, 1878	615	179	13	111
	Perkins, E. Lamson. (See Sawyer, Charles E., assignor.) .....					
	Perkins, Emma F., et al. (See Proctor, David R., assignor.) .....					
203, 494	Perkins, Francis B., Boston, Mass. Valve-operating mechanism for hydraulic elevators .....	May 7, 1878	270	78	13	858
200, 509	Perkins, Gardner H., Cazenovia, N. Y. Harrow .....	Oct. 29, 1878	1158	337	14	666
	Perkins, George B. (See Raymond & Perkins.) .....					
201, 122	Perkins, George H. and James H., Philadelphia, Pa., assignors of part interest to Joseph Le Comte, New York City, and Le Comte & Perkins Manufacturing Company, (limited), Philadelphia and New York. Metallic can .....	Mar. 12, 1878	308	94	13	468
202, 371	Perkins, George H. and Sarah Ann Jane (administratrix of James H. Perkins, deceased), Philadelphia, Pa., said Sarah Ann Jane Perkins assignor to said George H. Perkins. Metallic can .....	Apr. 16, 1878	559	163	13	686
203, 073	Perkins, George H., Philadelphia, Pa., assignor of part interest to Joseph Le Comte, New York, N. Y., and Atlantic Refining Company, Philadelphia, Pa. Machine for applying flux to cans .....	Apr. 30, 1878	1317	383	13	794
206, 193	Perkins, George H., Philadelphia, Pa. Combined clamp and soldering apparatus .....	July 23, 1878	832	237	14	126
200, 194	Same .....	July 23, 1878	833	237	14	126
211, 041	Perkins, George H., and George Brown, Philadelphia, Pa., assignors to Hannibal Meat Company (limited), Philadelphia, Pa., and Hannibal, Mo. Case for supporting cans .....	Dec. 17, 1878	756	207	14	936
	Same .....	Dec. 17, 1878	757	208	14	936
211, 042	Same .....					
	Perkins, Henry R. (See Harrison, Thomas W., assignor.) .....					
	Perkins, James H. (See Perkins, George H. and James H.) .....					
	Same .....					
206, 105	Perkins, John S., Worcester, Mass. Crimping-machine for boots and shoes .....	July 23, 1878	834	238	14	126
198, 812	Perkins, Joseph, San Francisco, Cal. Soluble-link pen .....	Jan. 1, 1878	93	26	13	22
203, 070	Perkins, Lyman C., Webster, Mass. Odometer .....	Apr. 30, 1878	1312	381	13	791
				382		
205, 761	Perkins, Miner T., Log Lick, Ky. Ox-yoke .....	July 9, 1878	336	98	14	55
200, 355	Perkins, Miner Talor, Log Lick, assignor of one-half interest to Benjamin T. Mills, Clark County, Ky. Branding-stamp .....	July 23, 1878	1022	292	14	150
201, 044	Perkins, Nahum Simeon Cary, assignor to Dauntless Manufacturing Company, Norwalk, Ohio. Bobbin-winder .....	Mar. 5, 1878	225	71	13	449
8, 443	Perkins, Palmer C., Mishawaka, Ind. Wind-engine .....	Oct. 8, 1878	450	133	14	557
202, 580	Perkins, Russell B., assignor to E. Miller & Co., Meriden, Conn. Lamp-burner .....	Apr. 16, 1878	782	225	13	714
	Perkins, Sarah Ann Jane, administratrix. (See Perkins, George H. and Sarah Ann Jane.) .....					
204, 079	Perkins, Seth W., Cambridge, Ill. Wagon end-gate .....	May 21, 1878	911	260	13	955
210, 143	Same .....	Nov. 19, 1878	670	190	14	778
206, 820	Perkinson, David F., assignor to William F. George, New York, N. Y. Cow-milker .....	Aug. 6, 1878	164	52	14	227
202, 046	Perley, Charles A., assignor to Thompson, Perley & Waite, Baldwinsville, Mass. Child's chair and carriage .....	Apr. 2, 1878	186	54	13	625
207, 205	Perley, Charles A., Templeton, assignor to Thompson, Perley & Waite, Baldwinsville, Mass. Nursery-chair .....	Aug. 20, 1878	582	174	14	286
	Perley, John. (See Furbush & Perley.) .....					
208, 100	Pernet-Jouffroy, Gabriel, Chalou-sur-Saone, France. Machine for cutting and stamping matches .....	Sept. 17, 1878	557	167	14	429
	Perrenot, Charles Francis. (See Bailey & Perrenot.) .....					
209, 833	Perrin, Charles, Springfield, Ohio. Interchangeable gearing for grain-drills .....	Nov. 12, 1878	327	98	14	729
198, 813	Perrin, George E., Boston, Mass. Spring-hook .....	Jan. 1, 1878	94	26	13	22
203, 495	Perrine, H. Lansing, Freehold, N. J. Brake-shoe .....	May 7, 1878	272	78	13	838
204, 601	Perris, William G., New York, N. Y. Printer's measuring-scale .....	June 4, 1878	174	56	13	1037
8, 361	Perrott, Francis W., assignor, by mesne assignments, to P. H. McGraw, McGrawville, N. Y. Corset .....	Aug. 6, 1878	204	65	14	232
204, 367	Perry, Algic, Covington, Tenn. Lap-link .....	May 28, 1878	1236	352	13	1000
210, 353	Perry, Benjamin P., Richmond, Ind. Valve-gear for engines .....	Nov. 26, 1878	913	267	14	813
	Perry, Bethune. (See Brett & Perry.) .....					
210, 626	Perry, Edward L., Patterson, N. J. Breech-loading fire-arm .....	Dec. 10, 1878	270	73	14	866
8, 061	Perry, Frank W., assignor to William A. Leavitt, Philadelphia, Pa. Bottle-stopper. (Reissue) .....	Jan. 29, 1878	1223	359	13	222
199, 165	Same .....	Jan. 15, 1878	471	139	13	89
	Perry, James L. (See Bridgeman, Almon, assignor.) .....					
204, 245	Perry, John Alexander, Carthage, Ala. Churning apparatus .....	May 28, 1878	1111	317	13	984
207, 438	Perry, Joseph R. and Samuel R., Wilkesbarre, Pa. Reed-organ .....	Aug. 27, 1878	832	246	14	323
				247		
	Perry, Roscoe A. (See Chapman, Stanley L., assignor.) .....					
	Perry, Samuel R. (See Perry, Joseph R. and Samuel R.) .....					
204, 080	Perry, Stuart, Newport, N. Y. Hay-tedder .....	May 21, 1878	912	261	13	955
	Perry, Uriah. (See Hogan, Andrew Isum, assignor.) .....					
198, 753	Perry, William V., Beaver Dam, Wis., assignor of one-half interest to Dillwyn Smith, Burlington, N. J. Safety-pocket .....	Jan. 1, 1878	25	6	13	12
208, 033	Pershall, James Russell, Saint Paul, Minn. Recording-lock .....	Sept. 17, 1878	497	148	14	420
204, 368	Petchell, Clement T., Brooklyn, N. Y. Rubber belting .....	May 28, 1878	1237	352	13	1000
199, 222	Peter, Louis, Saint Paul, Minn. Oil-can jacket .....	Jan. 15, 1878	524	154	13	98
206, 607	Peterman, John, Mendon, Mich. Window-cornice .....	July 30, 1878	1309	376	14	189
205, 675	Peters, George M., Columbus, Ohio. Sewing-machine guide .....	July 2, 1878	226	67	14	17
107, 980	Peters, George T., Jersey City Heights, N. J. Packing herrings .....	Sept. 10, 1878	425	128	14	406
	Peters Leather Dash Company. (See White, John E., assignor.) .....					
	Peters, Norman I. (See Gordon, James Harvey, assignor.) .....					
199, 568	Peters, Patrick F., Natick, Mass. Lasting-hammer .....	Jan. 22, 1878	881	258	13	162
201, 628	Peters, Samuel, Coloes, N. Y. Syringe .....	Mar. 26, 1878	860	262	13	557



## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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204, 912	Peters, Samuel, Cohoes, N. Y. Syringes.	June 18, 1878	536	156	13	1090
199, 739	Petersen, Theodore, Boston, Mass. Reefing fore-and-aft sails.	Jan. 29, 1878	1077	315	13	200
	Petersohn, August. (See Matthews & Petersohn.)					
	Peterson, Richard. (See Stuart, David, assignor.)					
209, 624	Peterson, Robert Evans, and Edward J. Frost, Philadelphia, Pa. Bronzing-machine.	Nov. 5, 1878	95	28	14	693
209, 625	Same. Process of bronzing and flocking paper, cotton, linen, &c.	Nov. 5, 1878	96	29	14	694
203, 936	Peterson, Wetherill, Philadelphia, Pa. Manufacture of red colors from copperas.	May 21, 1878	758	100	13	936
207, 891	Peterson, William Henry, Richmond, Ind. Pump.	Sept. 10, 1878	335	100	14	394
210, 144	Petmecky, Joseph C., Austin, Tex. Breech-loading fire-arm.	Nov. 19, 1878	671	199	14	778
209, 583	Petrie, Horace, Philadelphia, Pa. Sign.	Nov. 5, 1878	47	13	14	687
203, 765	Petry, George S., Troy Grove, Ill. Motor.	May 14, 1878	567	160	13	904
204, 167	Pottengill, Asa, Keene, assignor to self and Frank H. Colony, Harrisville, N. H. Spring-air-gun.	May 28, 1878	1027	292	13	973
	Pettit, Silas W. (See Alberger, Morris H., assignor.)					
210, 145	Pettit, Thomas J., San Francisco, Cal. Spring bed-bottom.	Nov. 19, 1878	672	200	14	778
	Pettus, Joseph, et al. (See Cooper, George B. F., assignor.)					
211, 043	Petty, James F., and Thomas J. Mobly, Frankford, Ind. Bee-hive.	Dec. 17, 1878	758	208	14	937
	Peugeot frères. (See Chalas, Pierre, assignor.)					
202, 459	Peux, John J., Brooklyn, assignor to Robbins & Appleton, New York, N. Y. Crown-push for stem-winders.	Apr. 16, 1878	644	188	13	698
	Pfarrer, Edward. (See Stohlmann & Pfarrer.)					
207, 892	Pfarrer, Edward, Brooklyn, N. Y. Sharpening-surface.	Sept. 10, 1878	335	101	14	394
205, 572	Pfaudler, John M., Rochester, N. Y. Apparatus for regulating the pressure in a series of fermenting-vessels.	July 2, 1878	118	34	14	24
	Same. Hose-coupling faucet for beer-fermenting vessels.	Nov. 26, 1878	754	224	14	793
210, 209	Pfeffer, Christian, Buffalo, N. Y. Child's carriage and sleigh box.	Nov. 26, 1878	813	241	14	800
200, 733	Pfeifer, August J., Newark, N. J. Transom-lifter.	Feb. 26, 1878	905	266	13	395
206, 127	Pfeifer, John, Philadelphia, Pa. Coal-bod.	July 16, 1878	741	212	14	111
206, 967	Pfeifer, Joseph, and Adam Ulrich, assignors of one-third interest to Ferdinand Leibold, Pittsburg, Pa. Apple corer and slicer.	Aug. 13, 1878	329	101	14	250
	Pfeiffer, Adolph. (See Starkenberg, Felix, assignor.)					
209, 189	Pfeiffer, Frank, Norfolk, Va. Oyster-package.	Oct. 22, 1878	827	238	14	615
209, 356	Pfeiffer, Godfrey, Newton, Iowa. Millstone-feeder.	Oct. 29, 1878	1000	291	14	643
	Pfister, John. (See Coe, Calvin J., assignor.)					
	Pflegger, George. (See Westwood & Pflegger.)					
209, 190	Pfleggar, Frank P., New Haven, Conn. Holdback.	Oct. 22, 1878	828	239	14	615
207, 439	Pfueger, Ernest F., Akron, Ohio. Drip-basin for barrels.	Aug. 27, 1878	835	247	14	323
203, 556	Phegley, William T., Bloomfield, Ind. Evaporating-pan.	May 14, 1878	339	101	13	878
210, 433	Phelan, John H., New York, N. Y. Valve-grinder.	Dec. 3, 1878	44	10	14	829
210, 354	Phelan, Thomas C., Gloversville, N. Y. Stove-pipe damper and regulator.	Nov. 26, 1878	923	267	14	813
202, 752	Phelps, Charles Hilton, Williamsfield, assignor to self and Jaynes S. Buell, Andover, Ohio. Fence.	Apr. 23, 1878	980	282	13	747
	Phelps, G. H., et al. (See Bennett, Erastus S., assignor.) (Reissue.)					
206, 038	Phelps, George E., Appleton, Wis. Child's carriage.	July 16, 1878	640	186	14	99
203, 369	Phelps, George M., Brooklyn, N. Y. Polarized electro-magnet.	May 7, 1878	140	40, 41	13	839
208, 537	Same. Printing-telegraph.	Oct. 1, 1878	82	24	14	500
209, 289	Same. Speaking-telephone.	Oct. 22, 1878	918	268	14	628
198, 904	Phelps, Ira M., assignor of part interest to Theo. L. Chase and H. J. Fillman, Philadelphia, Pa., and D. K. Allen, Boston, Mass. Amalgamator.	Jan. 1, 1878	189	53	13	38
200, 335	Same. Ore-amalgamator.	Feb. 12, 1878	456	135	13	311
200, 336	Same. Ore-crusher.	Feb. 12, 1878	457	135	13	311
206, 129	Phelps, Ira M., assignor of one-half interest to John Shillito, jr., Philadelphia, Pa. Fan-blower.	July 16, 1878	742	213	14	111
	Phelps, T. J., et al. (See Kendall, Stephen, assignor.)					
198, 814	Phelps, William E., Elmwood, Ill. Electro-magnetic watchman's time-recorder.	Jan. 1, 1878	95	26	13	22
204, 602	Phelps, William H., Greenville, Ga. Horse-power.	June 4, 1878	175	56	13	1037
	Philadelphia Burring Machine Works. (See Proctor, Josiah K., assignor.)					
207, 440	Philbrick, Jasper J., Cleveland, Ohio. Fruit-box.	Aug. 27, 1878	836	247	14	323
201, 196	Philips, Charles S., New York, N. Y. Apparatus for spraying tobacco.	Mar. 12, 1878	376	117	13	479
	Philips, E. F. (See Gable, John W., assignor.)					
206, 608	Philips, Isaac H., Pittsburg, Pa. Hatchway.	July 30, 1878	1310	376, 377	14	190
200, 840	Phillippi, Pompeius, Beardstown, Ill. Gate.	Mar. 5, 1878	28	10	13	419
203, 496	Phillipi, George W., Buffalo, N. Y. Bung-wrench.	May 7, 1878	272	78	13	858
203, 850	Phillippo, George W., and Joseph W. Owen, Geneseo, Ill. Lead-cutter.	May 21, 1878	669	189	13	924
209, 073	Phillips, Augustus K., Saint Louis, Mo. Window.	Oct. 15, 1878	685	198, 199	14	501
200, 567	Phillips, Calvin C., Philadelphia, Pa. Vertical grinding-mill.	Feb. 19, 1878	693	204	13	356
	Phillips, Daniel, et al. (See Rosewarne, William H., assignor.)					
	Phillips, E. F. (See Heaton, Lewis E., assignor.)					
	Phillips, Eugene F. (See Doolittle, Thomas B., assignor.)					
	Same. (See Reed, Thomas L., assignor.)					
202, 047	Phillips, Eugene F., Providence, R. I. Combined gas and electric conductor.	Apr. 2, 1878	187	54	13	625
206, 821	Same. Telephonic conductor.	Aug. 6, 1878	165	52	14	227
	Phillips, Frederick A. (See Harmon, Orville S., assignor.)					
202, 461	Phillips, George B., Bath-on-the-Hudson, N. Y. Portable forge.	Apr. 16, 1878	646	189	13	698
201, 123	Phillips, George H., Troy, N. Y. Drop-swinging oven-shelf.	Mar. 12, 1878	309	94, 95	13	468
202, 861	Phillips, Henry D., Baltimore, Md., and Carmi H. Williams, Brooklyn, N. Y. Brick-machine.	Apr. 23, 1878	1095	314	13	762
199, 464	Phillips, James, Jewell City, Kans. Wind-wheel governor.	Jan. 22, 1878	773	227	13	145
199, 569	Phillips, James J., Norfolk, Va. Shipping-can for oysters.	Jan. 22, 1878	882	258	13	162
206, 128	Same. Portable refrigerator.	July 16, 1878	741	213	14	111
202, 753	Phillips, John H., Greenville, Pa. Fruit-jar.	Apr. 23, 1878	981	282	13	747
	Phillips, Margaret J., et al. (See Rosewarne, William H., assignor.)					
205, 977	Phillips, Oscar F., Lynchburg, Va. Plow.	July 16, 1878	583	167	14	91
8, 404	Phillips, Phineas W., Salem, Mass., assignor, by mesne assignments to Daniel Low, James F. Almy, and Albert B. Russell. Curtain-roller and bracket.	Sept. 10, 1878	457	137	14	410
	Phillips, Samuel Edmund. (See Johnson & Phillips.)					
200, 337	Phillips, Thomas, Akron, assignor of one-half interest to Alfred Adams, Cleveland, Ohio. Paper for paper bags and apparatus for making the same.	Feb. 12, 1878	458	135	13	311
206, 822	Phillips, Thomas C., Huntington, V. Va. Refrigerator.	Aug. 6, 1878	167	53	14	227
202, 581	Phillips, Thomas H., Orwin, Pa. Self-oiling car-wheel.	Apr. 16, 1878	783	226	13	714
202, 582	Same. Wrench.	Apr. 16, 1878	783	226	13	714
202, 460	Phillips, William C., assignor to self, C. M. Tucker, and C. E. Remsen, Norwalk, Conn. Fire-escape.	Apr. 16, 1878	645	188	13	698

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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210, 627	Phillips, William H. ( <i>See</i> Bevins, Weis & Phillips.)					
8, 284	Phillips, William L., Brooklyn, N. Y. Heating-drum.	Dec. 10, 1878	271	73	14	868
208, 119	Phillips, Zelora, Little Rock, Ark. Brick-machine. (Reissue.)	June 11, 1878	493	143	13	1080
205, 762	Same. Baling-press.	Sept. 17, 1878	579	173	14	431
206, 130	Phinney, Hugh M., Cambridge, Mass. Hot-air furnace.	July 9, 1878	337	98	14	55
206, 686	Phinney, Theodore W., Chicago, Ill. Combined curb-stone and gutter for streets.	July 16, 1878	743	213	14	111
208, 490	Phippen, James, Dundas, Minn. Exhaust apparatus for millstones.	Aug. 6, 1878	33	9	14	210
206, 480	Phipps, Robert, Georgetown, D. C. Lock-hinge.	Oct. 1, 1878	35	11	14	494
	Phipps, William N., Glenwood, Iowa. Grain-tally.	July 30, 1878	1175	337	14	173
	Phoenix Iron Works Company. ( <i>See</i> Jennings, Frank K., assignor.)					
	Phoenix Plumbago Mining Company. ( <i>See</i> Dreher, Hiram J., assignor.)					
	Photo-Engraving Company. ( <i>See</i> Moss, John C., assignor.)					
210, 707	Piat, Albert, Paris, France. Reversible melting-furnace.	Dec. 10, 1878	351	96	14	878
207, 772	Picasso, Joseph, New York, N. Y. Cork-cutting machine.	Sept. 3, 1878	191	59	14	373
210, 628	Piccioli, Charles A., Montgomery, Ala. Convertible car seat and couch.	Dec. 10, 1878	272	74	14	868
200, 754	Pichon, Louis A., Paris, France. Scissors, forceps, &c.	Feb. 26, 1878	906	267	13	395
208, 034	Pick, Ignac, London, England. Victorine.	Sept. 17, 1878	408	148	14	420
202, 048	Pickens, Pulaski B., New York, N. Y. Work-box.	Apr. 2, 1878	188	55	13	625
204, 081	Same. Shirt.	May 21, 1878	915	261	13	955
203, 766	Pickett, John H., Baltimore, Md. Treating paper or other fabric with tobacco for use as a moth-preventive.	May 14, 1878	569	.....	13	904
207, 981	Pickford, William H., Philadelphia, Pa. Ticket-punch.	Sept. 10, 1878	426	129	14	406
208, 198	Pickhardt, Gustav Adolf, Barmen, Prussia, Germany. Wire belting.	Sept. 17, 1878	665	196	14	442
209, 511	Pickhardt, Wilhelm, New York, N. Y. Ventilating water-closet.	Oct. 29, 1878	1160	337	14	666
205, 673	Picking, Franklin Pierce, Pioche, Nev. Guide for the stems of stamp-mills.	July 2, 1878	119	35	14	24
209, 626	Pickles, Charles K., and Robert Barnes, Saint Louis, Mo. Wire-rope machine.	Nov. 5, 1878	97	28, 29	14	694
202, 462	Pienovi, Joseph, Newark, N. J. Rubber clog.	Apr. 16, 1878	647	189	13	699
199, 740	Pierce, Adelbert Wesley, Oconto, Wis. Door-spring.	Jan. 29, 1878	1078	316	13	200
	Pierce, Alfred G., et al. ( <i>See</i> Pearce & Taft, assignors.) (Reissue.)					
205, 901	Pierce, Charles D., Philadelphia, Pa. Rock-drill.	July 9, 1878	485	139	14	74
198, 997	Pierce, Charles W., New York, N. Y. Door-hanger.	Jan. 8, 1878	289	84	13	60
	Pierce, Ebenezer. ( <i>See</i> Eggers & Pierce.)					
200, 338	Pierce, Ebenezer, and Selmar Eggers, New Bedford, Mass. Breech-loading gun.	Feb. 12, 1878	459	135	13	311
210, 875	Pierce, Elijah S., Hartford, Conn. Drill-chuck.	Dec. 17, 1878	544	153	14	911
204, 504	Pierce, Everett W., Bennington, Vt. Subscription-book.	June 4, 1878	78	27	13	1024
209, 290	Pierce, George, Boston, Mass. Globe-valve.	Oct. 22, 1878	919	268	14	628
204, 246	Pierce, George N. ( <i>See</i> Seyfang, George, assignor.)					
208, 199	Pierce, Henry Alonzo, Moline, Ill. Fence-post.	May 28, 1878	1112	317	13	984
203, 074	Pierce, Isaac, Alma, Mich. Scoop.	Sept. 17, 1878	665	196	14	443
205, 132	Pierce, James. ( <i>See</i> Goodwin, George E., assignor.)					
203, 074	Pierce, John R., Orfordville, N. H. Spring for horseshoes.	Apr. 30, 1878	1319	383	13	795
205, 132	Pierce, Lewis, Salem, Mass. Roofing.	June 18, 1878	749	223	13	1118
	Pierce, S. Dermott. ( <i>See</i> King & Pierce.)					
199, 346	Pierce, Zephaniah Gilbert, Providence, R. I. Safety-pin.	Jan. 15, 1878	651	190	13	117
202, 751	Pierpont, George Rufus, North Haven, Conn. Straw-cutter.	Apr. 23, 1878	980	281	13	747
207, 546	Same. Carriage-curtain fastener.	Aug. 27, 1878	956	280	14	338
209, 711	Same. Ice-cutting apparatus.	Nov. 5, 1878	188	56	14	706
200, 841	Pierpont, Joshua, Bushnell, Ill. Sulky-plow.	Mar. 5, 1878	28	10	13	419
200, 842	Pierpont, Joshua, assignor to Pierpont & Tuttle, Bushnell, Ill. Plow-colter.	Mar. 5, 1878	29	10	13	419
	Pierpont & Tuttle. ( <i>See</i> Pierpont, Joshua, assignor.)					
205, 411	Pierson, Joseph A., Lincoln, Nebr. Feed-cooker.	June 25, 1878	1060	314	13	1164
203, 767	Pierson, Charles H., and Charles W. Ferguson, Janesville, Wis. Nutmeg-grater.	May 14, 1878	570	160	13	904
206, 481	Pierson, Charles T. ( <i>See</i> Thurston, Samuel H., assignor.)					
204, 082	Pierson, William A., Philadelphia, Pa. Wagon-jack.	July 30, 1878	1176	337	14	173
203, 935	Pies, John P., Spades, Ind. School-desk.	May 21, 1878	916	262	13	955
210, 556	Pigeon, Narcisse, Brooklyn, N. Y. Manufacturing glucose.	May 21, 1878	756	218	13	936
	Pike, Albert C. ( <i>See</i> Dean, Asahel H., assignor.)					
	Pilant, William H., Point Coupee, La. Apparatus for defecating cane-juice.	Dec. 3, 1878	178	48	14	846
	Pillow, John A., et al. ( <i>See</i> Clapp, George P., assignor.)					
	Pillsbury, Hannah M. ( <i>See</i> Milliken & Pillsbury.) (Reissue.)					
	Pillsbury, Oliver M. ( <i>See</i> Milliken & Pillsbury.) (Reissue.)					
	Pillsbury, Samuel, et al. ( <i>See</i> Zimmerman, Arnold W., assignor.)					
8, 262	Pimm, Robert W., and Annie Hull, Fagundus, Pa., administrators of John W. Hull, deceased; said Hull assignor of one-half interest to James E. Cochran. Machinery for operating pumps. (Reissue.)	May 28, 1878	1297	369	13	1007
8, 369	Pine, James K. A., Lansingburg, N. Y. Collar. (Reissue.)	Aug. 13, 1878	459	139	14	266
200, 475	Pine, John W., assignor to J. W. Buckley and C. D. Merritt, Brooklyn, N. Y. Extension-ladder.	Feb. 19, 1878	604	178	13	342
210, 960	Piner, John, Bonham, Tex. Addressing-machine.	Dec. 17, 1878	647	179	14	924
199, 099	Pingree, Hazen S. ( <i>See</i> Sharood & Pingree.)					
	Pinkham, Joseph, New Market, N. H. Nut-lock.	Jan. 8, 1878	385	115	13	76
211, 044	Pinto, Francis E., et al. ( <i>See</i> Albertson, Albert, assignor.) (Reissue.)					
205, 502	Pintsch, Julius, and Julius Schülke, Berlin, Prussia. Electric lighting device.	Dec. 17, 1878	759	208	14	937
202, 189	Piper, Edwin J., Springfield, Mass. Paper-ruling machine.	July 2, 1878	39	12, 13	14	14
	Piper, Gustav and Henry, New Holstein, Wis. Rein-holder.	Apr. 9, 1878	356	104	13	653
	Piper, Henry. ( <i>See</i> Piper, Gustav and Henry.)					
199, 223	Piper, Orin, Manchester, N. H. Shedding mechanism.	Jan. 15, 1878	525	154	13	98
199, 741	Pirch, August, Denver, Colo. Blacksmith's combined machine.	Jan. 29, 1878	1079	316	13	290
200, 755	Pirkle, William J., Cumming, Ga. Plow.	Feb. 26, 1878	906	267	13	395
204, 994	Piron, Simon, Paris, France. Hat-finishing machine.	June 18, 1878	618	181	13	1101
206, 823	Pirring, George, Ravenswood, Ill. Broom-binding device.	Aug. 6, 1878	168	53	14	227
209, 978	Pirz, Anthony, Long Island City, assignor, by mesne assignments, to Reuben C. Barrows, New York, N. Y. Manufacture of acetic acid.	Nov. 19, 1878	494	.....	14	754
	Same. Fertilizer.	Nov. 19, 1878	495	.....	14	754
209, 980	Same. Fertilizer.	Nov. 19, 1878	495	.....	14	754
208, 845	Pitcher, Adam, Northville, Ill. Hog and sheep catcher.	Oct. 8, 1878	425	123	14	553
208, 987	Pitcher, Hiram, Fond du Lac, Wis. Spring bed-bottom.	Oct. 15, 1878	583	170	14	578
203, 934	Pitkin, Peter, and John B. Dougherty, Rochester, N. Y. Stone-polishing machine.	May 21, 1878	754	218	13	935
208, 638	Pitney, Albert L., Washington, D. C. Barbed fence-wire.	Oct. 1, 1878	83	24	14	500
207, 547	Pitt, Alexander F., Jerseyville, Ill. Toe-weight for horses.	Aug. 27, 1878	957	280	14	358
199, 100	Pitt, William A., New York, N. Y. Sewer-trap.	Jan. 8, 1878	385	115	13	76
199, 101	Same. Overflow-valve.	Jan. 8, 1878	386	115	13	77
207, 676	Pitt, William A., assignor to Emma Tracy, New York, N. Y. Sewer-trap.	Sept. 3, 1878	93	28	14	360
204, 603	Pittman, William B., Vicksburg, Miss. Mailing-package.	June 4, 1878	176	56	13	1037

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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	Pitts Agricultural Works. (See Bronson, Levi, assignor.)					
203, 851	Pitts, Jesse G., Newark, N. Y. Moccasin	May 21, 1878	669	189	13	924
202, 862	Pitts, Marcellus H., assignor to H. A. Pitts' Sons Manufacturing Company, Chicago, Ill. Mounted horse-power	Apr. 23, 1878	1098	315	13	762
202, 863	Same. Grain-separator	Apr. 23, 1878	1099	315		762
	Pitts' Sons Manufacturing Company, H. A. (See Pitts, Marcellus H., assignor.)					
	Pitts, William Curtis, assignor of one-half interest to J. H. Bishop, San Marcos, Tex. Horse-power mill	May 7, 1878	61	19	13	828
204, 995	Place, Armstrong B., Denver, Colo. Coffee-pot	June 18, 1878	619	181	13	1101
199, 102	Plank, William, De Kalb, Ill. Barrel-cart	Jan. 8, 1878	387	115	13	77
	Plant, Joseph, et al. (See Hibbert, John, assignor.)					
204, 083	Plant, Paschal, Washington, D. C. Ore-separator	May 21, 1878	016	202	13	956
207, 622	Same. same	Sept. 3, 1878	38	12, 13	14	354
209, 074	Same. same	Oct. 15, 1878	687	199	14	591
	Plant, William, et al. (See Mann, William, assignor.)					
210, 223	Plasa, Carl Heinrich Ludwig, Hamburg, Germany. Piano-forte	Nov. 26, 1878	770	228	14	795
203, 497	Platt, Clark M., Waterbury, Conn. Button-fastening	May 7, 1878	273	78	13	858
200, 933	Platt, Francis W., assignor to self and Plume & Atwood Manufacturing Company, Waterbury, Conn. Student-lamp	Mar. 5, 1878	111	37	13	432
	Platt, George H. (See Drake, Samuel E., assignor.)					
206, 039	Platt, Julius A., Warren, Ill. Harrow	July 16, 1878	641	186	14	99
	Platt, Nathan E., et al. (See Holub, Frank, assignor.)					
210, 708	Platt, Thomas W., and Arthur M. Orwig, Windfall, Ind. Lifting-jack	Dec. 10, 1878	352	96	14	878
	Platts, George. (See Walden & Platts.)					
208, 285	Platz, Valentine, Indianapolis, Ind., and William W. Rogers, United States Army. Cartridge-belt	Sept. 24, 1878	757	222	14	457
208, 632	Pleines, Peter, New York, N. Y. Table	Oct. 1, 1878	178	52	14	513
	Plotts, G. W., et al. (See Hixson, Ezra, assignor.)					
	Plumb, Ben. M., et al. (See Green, John W., assignor.)					
	Plumb, David W. (See Glover, Almon B., assignor.)					
	Plumb, Frank J. (See Roberts, James J., assignor.)					
208, 846	Plumb, Sherman L., Portage, Wis., assignor to self and William Bard. Device for separating cream from milk	Oct. 8, 1878	426	123	14	553
204, 996	Plumb, William H., Mauch Chunk, Pa., assignor to Joseph A. Sterling, New York, N. Y. Ore-jigger	June 18, 1878	620	182	13	1101
203, 557	Plumbly, Frederic K., Buffalo, N. Y. Storing-tank for petroleum	May 14, 1878	360	102	13	878
207, 301	Same. Storing-tank	Aug. 20, 1878	679	202	14	290
	Plume & Atwood Manufacturing Company. (See Atwood, Lewis J., assignor.)					
	Same. (See Platt, Francis W., assignor.)					
209, 191	Plummer, Jerome H., Brooklyn, N. Y. Flower-pin	Oct. 22, 1878	828	230	14	615
207, 206	Plummer, Osgood, Worcester, Mass. Upright metal-drill	Aug. 20, 1878	583	175	14	286
208, 988	Plummer, William Sylvester, Portland, Oreg. Peach-parer	Oct. 15, 1878	584	170	14	578
8, 315	Plympton, Nathaniel, Boston, Mass. Tea-pot (Reissue)	July 2, 1878	277	82	14	43
	Pneumatic Tramway Engine Company. (See Hardie, James & Cooper, assignors.)					
	Pogue, David C. (See Magee, William, assignor.)					
208, 692	Pohl, Otto Ernst, Philadelphia, Pa. Metallic awning	Oct. 8, 1878	255	73	14	530
204, 369	Poindexter, Robert E., Anderson, Ind. Saw	May 28, 1878	1238	352	13	1000
203, 768	Poirier, Joseph, Oconto, Wis. Axle-adjuster	May 14, 1878	571	160	13	904
	Poirrier, Alcide François. (See Roussin, François Z., assignor.)					
207, 677	Poland, Charles A., Columbus, Ohio. Vehicle-axle skein	Sept. 3, 1878	94	28	14	361
201, 943	Poland, Samuel W., Monson, Mass. Vapor-escape attachment for cooking apparatus	Apr. 2, 1878	81	23	13	611
198, 855	Pole, Benjamin C., Washington, D. C. Device for printing tickets and recording cash receipts	Jan. 1, 1878	133	38	13	29
203, 643	Polen, Calvin Wesley, Hazel Dell, Ill. Garden-hoe	May 14, 1878	438	125	13	888
204, 247	Polen, Charles R., Sr., Hazel Dell, Ill. Clod-crusher	May 28, 1878	1113	317	13	984
209, 920	Poletti, Michel, Fribourg, Switzerland. Manufacture of bricks and tiles	Nov. 12, 1878	414	125	14	740
203, 642	Polk, James T., Greenwood, and Oliver H. Castle, Indianapolis, Ind.; said Castle assignor to said Polk. Green-corn cutter	May 14, 1878	430	124	13	887
210, 629	Pollard, James M., New Orleans, La., assignor to Moses Swartz. Wire bale-tie	Dec. 10, 1878	273	74	14	868
202, 864	Polley, Orson H., Plymouth, Mich. Earth-anger	Apr. 23, 1878	1100	315	13	762
	Pollmann & Co., Martin. (See Menger, Louis, assignor.)					
199, 570	Pollock, Darius, Wooster, Ind. Railway-switch	Jan. 22, 1878	882	259	13	162
210, 466	Pollock, Henry, Fredericton, New Brunswick, Canada. Thread-cutting attachment for sewing-machines	Dec. 3, 1878	80	20	14	834
	Pollock, John A. (See Travis, Thomas W., assignor.)					
	Pollock, John A., et al. (See Travis, Thomas W., assignor.)					
201, 355	Pollock, Joseph, Selma, Ala. Plow	Mar. 10, 1878	568	174	13	512
204, 842	Pollock, Julius L., Hoboken, N. J., assignor to B. T. Babbitt, New York. Toilet-soap	June 11, 1878	443		13	1074
205, 297	Pollock, Simon Locke, Saint Paul, Minn. Fire-proof shutter	June 25, 1878	940	279	13	1148
	Pomeroy, Mark M. (See Hooton, Marsena M., assignor.)					
200, 476	Pond, Charles L., Buffalo, N. Y. Terret for harness	Feb. 19, 1878	600	178	13	342
204, 248	Pond, David W., Worcester, Mass. Metal-drilling machine	May 28, 1878	1114	318	13	984
205, 412	Pond, Erasmus A., Rutland, Vt. Sphygmograph	June 25, 1878	1061	315	13	1164
207, 873	Pond, Goldsburly Harden, New York, N. Y. Tubular boiler	Mar. 5, 1878	01	21	13	424
8, 457	Pond, Henry E., Franklin, Mass., assignor to Robert E. Dietz, New York, N. Y. Signal-lantern (Reissue)	Oct. 15, 1878	726	210	14	598
200, 756	Pond, Joseph F., Cleveland, Ohio. Washing-machine	Feb. 20, 1878	907	267	13	395
203, 558	Pond, Levi W., Eau Claire, Wis. Rafting-boom	May 14, 1878	361	102	13	878
	Pond, Philander. (See Bendor & Pond.)					
209, 834	Pond, Robert J., New York, N. Y. Horse-detacher	Nov. 12, 1878	329	98	14	729
207, 064	Pontez, Charles, Omaha, Nebr. Excavator	Aug. 13, 1878	422	130	14	262
	Pontifex, Joseph H. (See Worth & Pontifex.)					
206, 482	Poole, Samuel, Brooklyn, N. Y. Pickle-fork	July 30, 1878	1177	337	14	173
202, 463	Pooler, Rheubin H., and William T. Jones, Serena, Ill. Cartridge-holder	Apr. 16, 1878	648	189	13	699
8, 085	Poor, Chandler, Dubuque, Iowa, assignor to Samuel S. White, Philadelphia, Pa. Dental drill (Reissue)	Jan. 20, 1878	1228	360, 361	13	223
202, 865	Poore, Townsend, Scranton, Pa. Boot and shoe	Apr. 23, 1878	1101	316	13	762
209, 357	Same. Boot	Oct. 29, 1878	1001	291	14	643
	Pope, Edwin B. (See Sheldon & Pope.)					
8, 044	Pope, Frank L., Elizabeth, N. J., assignor to self, Stephen C. Hendrickson, James N. Ashley, and James D. Lincoln. Electric railway-signal (Reissue)	Jan. 22, 1878	928	272	13	160
8, 045	Same. same. (Reissue)	Jan. 22, 1878	932	272	13	169
207, 548	Pope, Gardner. (See Dillon, George May, assignor.)					
	Pope, John L., Cleveland, Ohio. Tackle-block	Aug. 27, 1878	957	280	14	338

*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
200, 087	Pope, Joseph D., Caldwell County, Mo. Corn-planter	Feb. 5, 1878	190	62	13	264
199, 931	Pope, Joseph E., and Joseph S. Anthony, Taunton, Mass. Stove-leg	Feb. 5, 1878	44	14	13	239
205, 298	Pope, Joshua L., Brooklyn, and William S. Sampson, New York, N. Y. Car-coupling	June 25, 1878	941	279	13	1148
203, 644	Pope, Sampson, assignor to self and John M. Sims, Williamsburg, Miss. Cotton-press	May 14, 1878	430	125	13	888
205, 413	Popper, Isidor, New York, N. Y. Packing-box	June 25, 1878	1064	315	13	1164
206, 824	Same. Cigar-box	Aug. 6, 1878	169	53	14	227
8, 187	Popplein, George J., assignor to Popplein Silicated Phosphate Fertilizer Company, Baltimore, Md. Fertilizer (Reissue.)	Apr. 16, 1878	843	-----	13	722
203, 769	Porter, Alonzo W., New York, N. Y., assignor of one-fourth interest to George L. Shorey, Lynn, Mass. Street-lamp regulator	May 14, 1878	571	160	13	904
205, 678	Porter, Alonzo W., and Francis M. Grimes, New York, N. Y. Gas-regulator	July 2, 1878	229	68	14	38
206, 190	Porter, Alonzo W., New York, N. Y., assignor of one-tenth interest to George L. Shorey, Lynn, Mass. Carburetor	July 23, 1878	835	238	14	127
210, 146	Porter, Benjamin F., Meadville, Pa. Weight for horseshoes	Nov. 19, 1878	673	200	14	778
210, 537	Porter, Benjamin S., Ottawa, Ill., assignor to James G. English and Edwin F. Mer-sick, New Haven, Conn. Whiffletree-plate	Dec. 3, 1878	179	48	14	847
202, 464	Porter, Charles H., assignor to Pratt & Whitney Company, Hartford, Conn. Mold-er's flask	Apr. 16, 1878	650	190	13	699
201, 197	Porter, Charles T., Newark, N. J. Journal-box	Mar. 12, 1878	377	117	13	479
207, 441	Porter, Charlotte M. (See Roberts, Charles A., assignor.)					
205, 133	Porter, Edward N., Hardwick, Vt. Picture-frame clamp	Aug. 27, 1878	837	248	14	324
205, 413	Porter, Frederick E., assignor of one-half interest to Rodney B. Smith, Baltimore, Md. Paper-bag machine	June 18, 1878	749	223	13	1118
205, 414	Porter, Frederick E., Baltimore, Md., and David A. Beatson, New York, N. Y. Curtain-cord tightener	June 25, 1878	1065	315	13	1164
209, 981	Porter, George B., Corry, Pa. Mill for grinding hay, grain, &c	Nov. 19, 1878	496	150	14	754
208, 333	Porter, Henry W., Forestville, Conn. Clock striking mechanism	Sept. 24, 1878	824	241	14	466
207, 678	Porter, Horatio L., Elk City, Pa. Torpedo for oil-wells	Sept. 3, 1878	95	28	14	361
205, 677	Porter, Isaac, Philadelphia, Pa. Sheet-metal can	July 2, 1878	228	68	14	37
204, 605	Porter, James, Greenfield, Mass. Mop-head	June 4, 1878	178	57	13	1038
204, 483	Porter, John W., Westport, Conn. Mill-spindle	July 30, 1878	1177	337	14	173
205, 676	Porter, Robert, Philadelphia, Pa. Sheet-metal can	July 2, 1878	227	68	14	37
211, 045	Porter, Robert, Hulton, Pa. Side spring for vehicles	Dec. 17, 1878	761	209	14	957
202, 664	Porter, Roger W., Nashua, N. H. Shuttle-bobbin	Apr. 23, 1878	890	255	13	736
206, 896	Porter, Stephen, assignor to Martin W. Carr, Somerville, and Hiram W. Brooks, Cam-bridge, Mass. Clasp for supporting garments	Aug. 13, 1878	267	81	14	243
209, 358	Porter, Timothy R., Syracuse, N. Y. Bale-tie	Oct. 29, 1878	1062	291	14	643
199, 860	Porter, William R., Doylestown, Ohio. Wagon-coupling	Jan. 29, 1878	1191	350	13	217
202, 049	Portner, Robert, Alexandria, Va. Beer-cooler (Reissue.)	Apr. 2, 1878	188	55	13	625
208, 761	Post, Charles C. (See Sargent, J. B., assignor.) Post & Co. (See Kirby, John, Jr., assignor.) Same. (See Yoc, William P., assignor.)					
	Post, Edward E., Newburg, N. Y. Collapsible pile-tube	Oct. 8, 1878	329	94	14	540
	Post, James F., et al. (See Buie, Duncan M., assignor.)					
	Post, James F., Jr. (See Post, Thomas, assignor.)					
	Post, James F., et al. (See Wells, Isaac, assignor.)					
201, 556	Post, John W., New York, N. Y. Sleigh	Mar. 10, 1878	769	234	13	540
206, 385	Same. Elevated railway	July 23, 1878	1057	304	14	154
208, 491	Post, John W., New York, N. Y., assignor to Useful Machinery Company. Gear-cut-ting attachment for lathes	Oct. 1, 1878	36	11	14	494
208, 492	Same. Key-seat or pinion-cutter	Oct. 1, 1878	37	12	14	494
210, 051	Post, Thomas, assignor to self and James F. Post, Jr., Wilmington, N. C. Car-truck transfer	Nov. 19, 1878	570	171	14	764
200, 339	Pott, Charles W., Sparta, Wis. Horse-collar fastening	Feb. 12, 1878	460	136	13	311
	Pott, Young & Co. (See Young & Hafely, assignors.)					
210, 709	Potter, Charles, Jr. (See Hubbard, James F., assignor.) Potter, Charles, Jr., and James F. Hubbard, Plainfield, N. J. Double rack for recipro-cating motion	Dec. 10, 1878	353	97	14	878
201, 825	Potter, F. A., et al. (See Harper, Charles A., assignor.) Potter, Henry H., Sterlingville, N. Y., assignor of one-half interest to H. H. Doolittle, Philadelphia, Pa. Car-coupling	Mar. 26, 1878	1050	321	13	585
201, 826	Same. Railway-switch	Mar. 26, 1878	1051	321	13	586
209, 835	Potter, Henry H., Sterlingville, N. Y. Car-coupling	Nov. 12, 1878	330	98, 99	14	729
203, 932	Potter, J. Henry, East Bridgewater, Mass. Tremolo attachment for organs	May 21, 1878	752	217	13	935
210, 710	Potter, Joseph B., Knox P. O., assignor of one-half interest to Jarecki Manufacturing Company (limited), Erie, Pa. Piston for oil-well pumps	Dec. 10, 1878	354	97	14	878
209, 420	Potter, Merritt F., Hinckley, Ill. Milk-cooler	Oct. 29, 1878	1063	309	14	652
209, 192	Potter, Robert M., Jersey City, N. J., and William M. Sloane, assignors, by mesne as-signments, to William Bell, New York, N. Y. Pressure-regulator or governor	Oct. 22, 1878	829	239	14	615
	Potter, Thomas. (See Snow, Augustus C., assignor.)					
205, 415	Potter, Thomas, Philadelphia, Pa. Process for making oil-cloth	June 25, 1878	1065	-----	13	1164
207, 679	Same. Manufacture of floor oil-cloths	Sept. 3, 1878	95	29	14	361
202, 754	Potts, William W. (See Sprague, Watson N., assignor.) (Reissue.) Potts, Stacy, Philadelphia, Pa. Toy	Apr. 23, 1878	982	282	13	747
	Pouch, A. J., et al. (See Brock, William H., assignor.)					
	Pounds, David T. (See Crump, Thomas J., assignor.)					
202, 190	Powe, Moses, Phillipsburg, N. J., assignor to self and John Bitters, Easton, Pa. Fifth-wheel for vehicles	Apr. 9, 1878	350	104	13	653
207, 540	Powell, Eleanah, New London, Ind. Sign	Aug. 27, 1878	958	281	14	338
	Powell, F. A., et al. (See Powell, Newman J., assignor.)					
	Powell, Henry C. (See Bartum & Powell.)					
8, 367	Powell, James, Cincinnati, Ohio. Globe-valve (Reissue.)	Aug. 13, 1878	455	130	14	266
8, 368	Same. (Reissue.)	Aug. 13, 1878	458	159	14	266
209, 982	Powell, James H., assignor of one-third interest to S. F. Powell, Newark, N. J. Stove	Nov. 19, 1878	496	150	14	754
	Powell, John, et al. (See Powell, Newman J., assignor.)					
204, 606	Powell, John G., Philadelphia, Pa. Escapement for toy watch	June 4, 1878	179	57, 58	13	1038
204, 607	Same. Toy watch and clock	June 4, 1878	181	58	13	1038
	Powell, Llewellyn A. (See Fahnestock & Powell.)					
209, 133	Powell, Newman J., Fairmont, Neb., assignor to self, John and F. A. Powell, and Susanna L. Robinson, Pontiac, Ill. Smoothing-iron	Oct. 22, 1878	769	223	14	607
	Powell, S. F. (See Powell, James H., assignor.)					
199, 660	Powell, Thomas, Stockton, Cal. Derrick	Jan. 29, 1878	1005	292	13	189
199, 661	Same. Netting for unloading wagons	Jan. 29, 1878	1006	293	13	189



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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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205, 679	Powell, Thomas, assignor of one-half interest to Lewis Ladomus, Philadelphia, Pa. Burglar-alarm	July 2, 1878	232	68, 69	14	38
208, 423	Powell, Thomas, Martinsville, Ind. Machine for cutting green corn from the cob	Sept. 24, 1878	919	269	14	478
	Powell, William. (See Vaux, Ethan Parmar, assignor.)					
	Powelson, B. F., et al. (See Obernetter, Johann Baptist, assignor.)					
210, 355	Powers, Abner P., Flowery Branch, assignor of one-half interest to John H. Powers, Cochran, Ga. Grain-dropper	Nov. 26, 1878	914	268	14	813
	Powers, Beverly, et al. (See Young, Frederick, assignor.)					
203, 852	Powers, E. M., et al. (See Sheldon & Pope, assignors.)					
	Powers, Jay W., assignor of two-thirds interest to E. S. Purdy and A. H. Armor, Portage, Wis. Vessel for setting milk	May 21, 1878	670	190	13	924
208, 925	Powers, Jay W., Chicago, Ill. Fruit and vegetable evaporator	Oct. 15, 1878	519	151	14	569
210, 876	Powers, Jay W., Portage, Wis. Cream-raising apparatus	Dec. 17, 1878	545	153	14	911
210, 877	Same. Flow-clevis	Dec. 17, 1878	546	154	14	912
207, 368	Powers, Jennie, Brooklyn, N. Y. Medical compound	Aug. 27, 1878	762		14	314
	Powers, John H. (See Powers, Abner P., assignor.)					
199, 103	Powers, Seth Howard, assignor of one-third interest to J. L. Dobson, Salisbury, Mo. Horse hay-rake	Jan. 8, 1878	387	116	13	77
201, 827	Powers, Thomas M., Saint Louis, Mo. Sheet-metal-pan machine	Mar. 20, 1878	1052	321	13	586
	Powers, William H., et al. (See Arnold, Horace L., assignor.)					
	Powers, William T., et al. (See Arnold, Horace L., Assignor.)					
	Prahar, Louis. (See Read & Prahar) (Reissue.)					
202, 755	Prahar, Louis, New York, N. Y. Clasp for pocket-books	Apr. 23, 1878	984	283	13	747
	Prall, J. L. (See Prall, William E., assignor.)					
199, 465	Prall, Justus H. K., Elmira, N. Y. Transom-lifter	Jan. 22, 1878	774	227	13	145
208, 633	Prall, William E., Washington, D. C., assignor to J. L. Prall, New York, N. Y. Heating and ventilating buildings	Oct. 1, 1878	179	52	14	513
	Pratt, D. W. (See Conarroe, Robert, assignor.)					
202, 866	Pratt, George M., assignor to Victor Sewing Machine Company, Middletown, Conn. Micrometer-gage	Apr. 23, 1878	1102	316	13	763
209, 712	Same. Clutch for band-wheels of sewing-machines	Nov. 5, 1878	189	56	14	706
8, 525	Pratt, Henry L., Brooklyn, N. Y., assignor, by mesne assignments, to Miller's Falls Company, Ewing, Mass. Bit-stock	Dec. 17, 1878	799	219	14	942
200, 757	Pratt, Henry L., Brooklyn, N. Y. Ratchet bit-brace	Feb. 26, 1878	908	267	13	396
205, 808	Pratt, John F., San Francisco, Cal. Electric gravity-escapement for pendulums	July 9, 1878	390	112	14	62
201, 444	Pratt, Orrin, Northampton, Mass., assignor to E. M. Wright, Geneva, N. Y. Fastening the end of band-saws	Mar. 19, 1878	655	199	13	524
204, 913	Pratt, Philip W., Abington, Mass. Furniture-pad	June 18, 1878	537	156	13	1090
207, 680	Same. Chair-pad	Sept. 3, 1878	96	29	14	361
209, 584	Pratt, Rufus N., Hartford, Conn. Combined heater and feeder for boilers	Nov. 5, 1878	48	13, 14	14	687
199, 663	Pratt, S. Clesson, Chicago, Ill. Electric-galvanic chair	Jan. 29, 1878	1008	293	13	189
	Pratt, S. M., et al. (See Putnam, John S., assignor.)					
	Pratt & Whitney Company. (See Grant, Sawyer & Gardner, assignors.)					
	Same. (See Porter, Charles H., assignor.)					
208, 693	Pray, Benjamin S., trustee. (See Beers, Wheeler, assignor.)					
199, 104	Pray, Dudley, Boston, Mass. Sugar-train	Oct. 8, 1878	256	73	14	531
205, 134	Pray, Joseph F., Boston, Mass. Sulkv	Jan. 8, 1878	388	116	13	77
199, 932	Preise, Henry, New York, N. Y. Argand lamp-burner	June 18, 1878	754	224	13	1119
208, 989	Preiss, John, Buffalo, N. Y. Exercising-machine	Feb. 5, 1878	45	14	13	240
	Prenot, Louis, and George Marchal, New York, N. Y. Machine for turning wooden heels	Oct. 15, 1878	585	170	14	578
	Prentice, Benjamin B. (See Hill & Prentice.)					
199, 105	Prentice, Charles Frederick, New York, N. Y. Billiard-bridge	Jan. 8, 1878	389	116	13	77
201, 445	Prentice, George W., Providence, R. I. Lacing-button	Mar. 19, 1878	655	200	13	524
207, 818	Same. Button-fastener	Sept. 10, 1878	248	78	14	384
201, 045	Prentice, James H., Saginaw, Mich. Fire-kindler	Mar. 5, 1878	226	71	13	449
207, 681	Presbrey, Oliver Stetson, Port Henry, N. Y. Hoisting apparatus	Sept. 3, 1878	97	29	14	361
8, 160	Prescott, De Witt Clinton, Marinette, Wis. Direct-acting steam-feed works for circular-saw mills	Apr. 9, 1878	494	144	13	672
205, 763	Prescott, Edwin, Hampton Falls, N. H. Door-hanger	July 9, 1878	338	98	14	55
207, 442	Same. Carriage-jack	Aug. 27, 1878	838	248	14	324
	Prescott, George B. (See Edison, Thomas A., assignor.)					
210, 467	Prescott, George B., et al. (See Smith, Gerritt, assignor.)					
210, 468	Prescott, George Washington, Battle Creek, Mich. Buffer for locomotive-tenders	Dec. 3, 1878	81	20	14	834
200, 758	Same. Cone, &c., for locomotive smoke-stacks	Dec. 3, 1878	81	20	14	834
201, 891	Prescott, Merritt Sheldon, Otisville, Mich. Ironing-table	Feb. 26, 1878	909	268	13	396
207, 773	Prescott, Noah, Westford, Mass. Bottle-stopper	Apr. 2, 1878	32	9	13	603
199, 571	Prescott, William, Albany, N. Y. Pigment	Sept. 3, 1878	193		14	373
	Presko, Frederick A., New York, N. Y. Fire-escape	Jan. 22, 1878	883	259	13	162
	Pressure Extract Company. (See Miller, Jonathan, assignor.)					
205, 902	Preston, E. B. (See Caswell, William A., assignor.)					
206, 131	Preston, Everett B., Chicago, Ill. Apparatus for detaching hose from couplings	July 9, 1878	487	139	14	74
	Preston, George, Brooklyn, assignor to R. Hoe & Co., New York, N. Y. Griper-motion for printing-machines	July 16, 1878	744	{ 213 } { 214 }	{ 14 }	{ 111 }
206, 609	Preston, John W., Buffalo, N. Y. Corn-husking implement	July 30, 1878	1310	377	14	190
208, 354	Preston, Julius A., New Haven, Conn. Canal boat or barge	Sept. 24, 1878	827	242	14	466
202, 961	Preston, Othniel, Hornellsville, N. Y. Machine for making hollow wire cable	Apr. 30, 1878	1211	350	13	780
201, 829	Preston, Sylvester H., Worth P. O., Pa. Vehicle-gear	Mar. 26, 1878	1055	322	13	586
	Price, Andrew M., et al. (See Price, John, assignor.)					
201, 828	Price, Benjamin F., Moline, Ill. Stump-extractor	Mar. 26, 1878	1053	322	13	586
202, 116	Price, Charles B., Louisville, Ky. Invalid-mattress	Apr. 9, 1878	275	81	13	642
203, 770	Price, Charles C., jr., Elizabeth City, N. C. Rowlock	May 14, 1878	572	161	13	904
209, 512	Price, Chauncy G., and James M. Merritt, Tama County, Iowa. Sulky-plow	Oct. 29, 1878	1161	338	14	666
199, 466	Price, Francis H., Irvington, and Alfred S. Campbell, Elizabeth, N. J. Photographic vignetting device	Jan. 22, 1878	774	227	13	145
210, 147	Price, George P., Carlisle Station, Ohio. Plow-sulky and cultivator	Nov. 19, 1878	673	200	14	778
204, 757	Price, Jacob, San Leandro, Cal. Hay-press	June 11, 1878	346	105	13	1064
	Price, James C., et al. (See Price, John, assignor.)					
203, 645	Price, James W., Michigantown, Ind. Grinding-mill	May 14, 1878	440	125	13	883
202, 372	Price, John Leavitt, assignor to Andrew M. and James C. Price, Carroll County, Ohio. Coal-drilling machine	Apr. 16, 1878	560	164	13	686
	Price, John A. (See McClave & Price.)					
201, 630	Price, John A., Scranton, Pa. Stove-grate	Mar. 26, 1878	863	262	13	557
205, 503	Same. Same	July 2, 1878	42	13	14	14



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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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205, 680	Price, John A., Scranton, and William McClave, Pittston, Pa. Reversible stove-grate..	July 2, 1878	283	69	14	38
208, 120	Price, Maurice, New York, N. Y. Bosom-board .....	Sept. 17, 1878	584	173	14	432
202, 668	Price, Orlando V., Mount Vernon, Ohio. Lifting-jack .....	Apr. 23, 1878	893	256	13	736
	Price, V. Clarence, <i>et al.</i> (See Spencer, Archelaus E., assignor.)					
	Price, William B. (See Martin, John F., assignor.)					
206, 968	Price, William V., and John G. Klingaman, Laporte City, Iowa. Coloring photographs.	Aug. 13, 1878	330	.....	14	251
	Priesner, Josef. (See Wollenberg & Priesner.)					
204, 249	Priest, Johnson, Lynn, Mass. Rack for holding and exhibiting shoes .....	May 28, 1878	1115	318	13	964
	Priestman, Edmund. (See Singleton & Priestman.)					
	Priestman, Samuel. (See Priestman, William Dent and Samuel.)					
203, 771	Priestman, William Dent and Samuel, Kingston-upon-Hull, England. Apparatus for working grapple-buckets, forks, or skips .....	May 14, 1878	573	161	13	905
206, 259	Prime, Eli S., Baltimore, Md. Wantage-rod .....	July 23, 1878	905	258	14	126
199, 742	Primus, William Wesley, assignor to self and R. W. Hamilton, Murphysborough, Ill. Reciprocating churn-dash .....	Jan. 29, 1878	1080	317	13	200
208, 634	Prince, Louis, Nashville, Ohio. Dumping-car .....	Oct. 1, 1878	183	52	14	513
	Prince, L. P., <i>et al.</i> (See Edwards & Lee, assignors.)					
204, 914	Prince, Samuel F., jr., Philadelphia, Pa. Air-brake .....	June 18, 1878	538	157	13	1080
	Prince, Thomas. (See Robinson, Andrew J., assignor.)					
202, 465	Prince, William Monroe, Pittsfield, Mass. Pen .....	Apr. 16, 1878	651	190	13	699
8, 411	Prindle, Edward T., Aurora, Ill., assignor, by mesne assignments, to E. P. Monroe, Newark, N. J. Piston rod packing .....	Sept. 10, 1878	464	139	14	411
204, 379	Prindle, Franklin C., Philadelphia, Pa. Movable hopper for tanks, &c. ....	May 28, 1878	1239	352	13	1000
204, 449	Prindle, John A., assignor of one-half interest to James R. Woranick, Cleveland, Ohio. Steam-gage siphon .....	June 4, 1878	34	11	13	1017
206, 825	Prindle, John A., Cleveland, Ohio. Beer-pump valve .....	Aug. 6, 1878	170	54	14	227
203, 370	Pringle, Henry. (See Pringle, William Allen and Henry.)					
201, 700	Pringle, William Allen and Henry, Belleville, Ontario, Canada. Draw-bridge gate. ....	May 7, 1878	141	41	13	839
	Pritchard, James, San Francisco, Cal. Car-starter .....	Mar. 26, 1878	921	282	13	566
	Pritchard, S. B. (See Williams, Julius C., assignor.)					
	Proctor, Alice F., <i>et al.</i> (See Proctor, David R., assignor.)					
	Proctor, David C., <i>et al.</i> (See Kinsey, Samuel A., assignor.)					
	Proctor, David C. (See Rochl, Carl, assignor.)					
202, 191	Proctor, David R., Gloucester, assignor to Alfred C. Hill, East Saugus, Emma F. Perkins and Alice F. Proctor, Gloucester, Mass. Tap-sole for boots and shoes .....	Apr. 9, 1878	357	105	13	653
206, 132	Proctor, David R., Gloucester, Mass. Spark-arrester .....	July 16, 1878	745	214	14	111
8, 473	Proctor, Josiah K. (See Pundleton & Proctor.)					
208, 493	Proctor, Josiah K., assignor of one-half interest to James Smith & Co., Philadelphia, Pa. Wool-washing machine .....	Oct. 29, 1878	1200	348	14	672
	Proctor, Josiah K., Philadelphia, Pa., assignor to Philadelphia Burring Machine Works. Wool-burring machine .....	Oct. 1, 1878	38	12	14	494
207, 302	Prophet, Benjamin A., Center Township, Greene County, Mo. Epithem .....	Aug. 20, 1878	681	.....	14	299
208, 762	Proseus, Alfred, Baltimore, Md. Thill-coupling .....	Oct. 8, 1878	330	94	14	540
206, 197	Prosser, John, Pittsburg, Pa., assignor to self and Lewis, Oliver & Phillips. Machine for coiling wire .....	July 23, 1878	839	239	14	127
206, 610	Prosser, John, Ottumwa, Iowa. Extracting metals from their ores .....	July 30, 1878	1311	.....	14	190
211, 046	Prosser, Treat T., Chicago, Ill. Relief-valve for hose-couplings .....	Dec. 17, 1878	762	209	14	837
203, 208	Prott, Carl, Berlin, Prussia. Valve-gear .....	June 25, 1878	847	251	13	1136
207, 443	Prout, Horace N., Westfield, Mass. Hoeing-machine .....	Aug. 27, 1878	830	248	14	324
209, 513	Prouty, Augustus B., Worcester, Mass. Pump .....	Oct. 29, 1878	1163	338	14	666
206, 826	Prouty, Enoch, Roscobel, Wis. Cylinder printing-machine .....	Aug. 6, 1878	171	54	14	228
	Prouty, Jackson. (See Maloney, Martin L., assignor.)					
211, 047	Prouty, Joel Harvey, and Solon Smith Sprague, Worcester, Mass. Mechanism for oiling spindles in spinning-frames .....	Dec. 17, 1878	762	209	14	937
211, 048	Same. Loom-temple .....	Dec. 17, 1878	763	209	14	937
203, 933	Provost, Peter, Minneapolis, Minn. Grain-drier .....	May 21, 1878	754	217	13	985
206, 198	Prowse, George R., Montreal, Quebec, Canada. Stove .....	July 23, 1878	840	240	14	127
	Prusha, William F. (See Brigham, Hewitt & Prusha.)					
200, 839	Prusha, William F., assignor of two-thirds interest to W. B. Brigham, Hudson, and E. Alden, Marlborough, Mass. Metallic nail-strip for boots and shoes .....	Mar. 5, 1878	27	9	13	419
	Pryor, David D. (See Schofield & Pryor.)					
208, 121	Pryor, John D. (See Rigby, Nicholas L., assignor.)					
207, 774	Puckett, Miles, Walesca, Ga. Washing-machine .....	Sept. 17, 1878	585	173	14	432
	Puech, Pierre, Paris, France. Preparing and cleansing wool on the pelt .....	Sept. 3, 1878	193	.....	14	373
204, 084	Puffer & Sons, A. D. (See Steutermann, John C., assignor.)					
200, 759	Puller, Thomas, and George Washington Warren, Wellsville, N. Y. Halter .....	May 21, 1878	917	262	13	956
199, 166	Pumphrey, Josiah, Birmingham, England. Autographic printing .....	Feb. 26, 1878	910	.....	13	396
	Purdy, Charles G., assignor to self and Marx Kline, New York, N. Y. Machine for polishing moldings .....	Jan. 15, 1878	472	139	13	89
	Purdy, E. S., <i>et al.</i> (See Powers, Jay W., assignor.)					
209, 134	Purinton, Judson K., Dallas Centre, Iowa. Feed-cooker and steam-washer .....	Oct. 22, 1878	770	223	14	608
202, 373	Purtell, David W., Milwaukee, Wis. Man-hole plate for sewer-openings .....	Apr. 16, 1878	561	164	13	686
201, 446	Purves, Thomas C., Chicago, Ill. Apparatus for removing sediment from steam-boilers .....	Mar. 19, 1878	656	200	13	524
204, 250	Same. .... same .....	May 28, 1878	1116	{ 318 } 319	13	984
203, 075	Purvine, William, Butte, Mont. Amalgamator .....	Apr. 30, 1878	1319	383	13	795
206, 040	Pusey, Francis W., Carthage, Ind. Wheel-cultivator .....	July 16, 1878	642	186	14	99
	Pustkuchen, George. (See Sahlfeld, Frederick, assignor.)					
	Putnam, Archibald. (See Gere, Theodore D., assignor) .. (Reissue.)					
	Putnam, George P., <i>et al.</i> (See Gingras, Timothy, assignor.)					
	Putnam, Henry W. (See Sedgwick, Charles, assignor.)					
207, 982	Putnam, Henry William, Bennington, Vt. Bottle-stopper and stopper-fastener .....	Sept. 10, 1878	428	129	14	407
207, 893	Putnam, John S., assignor of two-thirds interest to S. M. Pratt and Eugene Cowles, Cherokee, Iowa. Pump .....	Sept. 10, 1878	336	101	14	394
	Putnam Nail Company. (See Putnam, Silas S., assignor.)					
	Putnam, Nathan C. (See Gardner, Addison E., assignor.)					
201, 701	Putnam, Silas S., assignor to Putnam Nail Company, Boston, Mass. Machine for pointing and finishing horseshoe-nails .....	Mar. 26, 1878	923	{ 282 } 283	13	567
203, 191	Putnam, Silas S., assignor to New Era Coffee Company, Boston, Mass. Table beverage .....	Apr. 30, 1878	1440	.....	13	810
207, 444	Putnam, Silas S., assignor to Putnam Nail Company, Boston, Mass. Machine for forging horseshoe-nails .....	Aug. 27, 1878	840	{ 248 } 249	14	324
198, 815	Putney, Nelson H., Bridgeport, Conn. Pendulum-scales for weighing .....	Jan. 1, 1878	95	26	13	22
	Pyle, Samuel W. (See Gifford & Pyle.)					
210, 558	Pyne, John Walter, Louisville, Ky. Middlings-separator .....	Dec. 3, 1878	180	48	14	847

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
208, 200	Quackenboss, George W., <i>et al.</i> (See Hicks, Alonzo, assignor.) Quackenboss, Philip P., Philadelphia, Pa. Fire-extinguisher for car-stoves .....	Sept. 17, 1878	666	196	14	443
199, 890	Quail, William. (See Grover, Oliver F., assignor.) Queen, N. W., <i>et al.</i> (See Cooper, George B. F., assignor.) Quern, Daniel, assignor of one-half interest to Hezekiah Floyd, Shamokin, Pa. Hydrant-valve .....	Jan. 29, 1878 June 25, 1878	1219 847	358 251	13	221 1136
205, 209	Quick, Elias B., Brooklyn, N. Y. Reverse-way cock .....	Mar. 12, 1878	476	{ 145 146 }	13	492
201, 286	Quie, Ole H., Holden, Minn. Windmill .....	Mar. 5, 1878	226	71	13	450
201, 046	Quigg, Lewis, assignor of one-half interest to Oliver B. Keely, Spring City, and Enos S. Shantz, Philadelphia, Pa. Implement for cutting bread, meat, &c. .... Quimby, Edward E. (See Weston, Edward, assignor.) Quimby, Enoch R., Lynn, Mass., assignor of one-half interest to Octavus C. Mason, Sterling, Ill. Car-coupling .....	Apr. 9, 1878 Nov. 19, 1878 Oct. 1, 1878	276 497 184	81 151 53	13	643 755 513
209, 983	Quinby, Ivory, Salem, Mass. Snow-plate for horseshoes .....	Feb. 19, 1878	536	159	13	332
208, 635	Quinby, Levi C., Monticello, Iowa. Metallic harness-loop .....	Nov. 26, 1878	915	268	14	814
200, 407	Quincy, Edmund W., assignor of two-thirds interest to John Y. and William H. Mills, Peoria, Ill. Check-row attachment to corn-planters .....	May 7, 1878	274	.....	13	858
210, 356	Quinlan, Edmund, Sheboygan Falls, Wis. Teeth for hand-rakes .....	June 4, 1878	34	11	13	1017
203, 498	Quinlan, John H., jr. (See Quinlan, Norman and John H., jr.) Quinlan, Norman and John H., jr., Glens Falls, N. Y. Leather-dressing compound .. Quinn, William J., <i>et al.</i> (See Brown, William D., assignor.) Quinn, James E. (See Quinn, Thomas H. and James E.) Quinn, John, Omaha, Nebr. Casting car-wheels .....	July 9, 1878 May 28, 1878 Nov. 26, 1878 July 2, 1878	488 1239 755 42	139 353 224 13	14	74 1000 793 14
205, 903	Quinn, John H., Boston, Mass. Water-closet valve .....	May 21, 1878	918	263	13	956
204, 371	Quinn, Thomas H. and James E., Racine, Wis. Fountain-pen .....	Nov. 26, 1878	915	268	14	814
210, 210	Quint, Henry F., Holyoke, Mass. Coffin .....	Apr. 16, 1878	652	190	13	699
205, 504	Quisenberry, John M., Salem, Va. Mill-spindle .....	Apr. 16, 1878	652	191	13	699
204, 085	Rabbeth, Francis J., Pawtucket, R. I. Reservoir bolster-bearing for spindles of spinning machinery .....	May 14, 1878	574	161	13	905
210, 357	Rabbeth, Francis J., Providence, R. I. Spindle for spinning machinery .....	Feb. 5, 1878	200	63	13	264
210, 358	Same..... Spindle for spinning-machines .....	Feb. 26, 1878	978	288	13	406
202, 466	Rabenberg, Johan, Breckinridge, Mo. Artificial chicken-mother .....	May 21, 1878	671	190	13	924
202, 467	Same..... Incubator .....	May 21, 1878	919	263	13	950
203, 772	Raby, James B., Quincy, and Daniel J. Summers, Shady Grove, Pa. Car-coupling .. Radcliffe, William. (See Young, Hugh, assignor.) Raddin, John, Lynn, Mass. Vehicle-wheel .....	Apr. 9, 1878 June 25, 1878 Nov. 26, 1878	278 942 1192	82 279 350	13	643 1148 217
200, 088	Rae, John, assignor to Thomas M. Stewart, New York, N. Y. Carpet-cleaning machine. Rae, John, New York, N. Y. Pressure-indicator for steam-engines .....	Oct. 29, 1878 Oct. 8, 1878	1003 331	292 94	14	643 540
203, 853	Raeburn, Robert, <i>et al.</i> (See Ramage, Alexander, assignor.) Raetz, Christopher, San Francisco, Cal. Spinning-top .....	Oct. 8, 1878	332	94	14	540
199, 861	Raetz, Christopher, San Francisco, Cal. Cleansing and scouring device .....	Mar. 5, 1878	228	72	13	450
209, 359	Rabner, John George, Portland, Oreg. Spring bed and fire-escape .....	July 30, 1878	1311	377	14	190
208, 763	Same..... Combined knife and match safe .....	Aug. 13, 1878	267	81	14	243
208, 764	Raiber, Joseph, Baltimore, Md. Apparatus for cooling wort during fermentation .. Same..... Wort-cooling vat .....	May 14, 1878 July 16, 1878	441 746	126 214	13 14	888 111
201, 047	Raible, Constantin, Oskaloosa, Iowa. Meal-bin .....	Aug. 13, 1878	423	131	14	263
206, 611	Raichard, Nikolaus. (See Krick & Raichard.) Rainey, Samuel, San Francisco, Cal. Fire-hydrant .....	Apr. 16, 1878	561	{ 164 165 }	13	686
206, 897	Ralston, Harper M., Fairview, W. Va. Lock-hinge .....	Aug. 13, 1878	330	101	14	251
203, 646	Ralya, John J., Cleveland, Ohio. Water purifier and heater for boilers .....	Sept. 24, 1878	758	222	14	457
206, 133	Same..... Feed-water heater .....	May 28, 1878	1240	353	13	1000
207, 065	Ramage, Alexander, assignor of three-fourths interest to William Brown, H. T. Engle, and Robert Raeburn, Denver, Colo. Ore roasting and desulphurizing furnace .. Ramsdell, George, Detroit, Mich. Apparatus for manufacturing illuminating-gas ....	May 21, 1878 Apr. 2, 1878 Apr. 23, 1878	921 189 1103	263 55 316 317	13	956 626 763
202, 374	Ramsdell, John B. F. (See Richardson, William G., assignor.) Ramsdell, Ossian J., Springfield, Mass. Advertising-card .....	Apr. 16, 1878	653	191	13	699
206, 969	Ramsey, Charles K., Saint Louis, Mo. Combined ash box and sifter .....	Sept. 17, 1878	666	196	14	443
204, 372	Ramsey, Joseph, jr., Bellwood, Pa. Car-brake .....	July 23, 1878	907	258	14	136
204, 087	Ramsey, Robert H., Philadelphia, Pa. Car-truck shifting apparatus .....	June 25, 1878	1066	315	13	1164
202, 050	Same..... Car-transfer apparatus .....	Mar. 26, 1878	1056	322	13	586
202, 867	Rand, Alonzo C., Minneapolis, Minn. Manufacturing illuminating-gas .....	Nov. 5, 1878	190	56	14	706
202, 468	Same..... Refrigerator .....	Jan. 8, 1878	243	70	13	53
208, 201	Rand, Charles N., Cedar Rapids, Iowa, assignor of one-half interest to J. T. Kiggins. Metal post for wire fences .....	Apr. 2, 1878	82	23	13	611
206, 260	Rand, McNally & Co. (See Burns, Garrett, assignor.) Randall, Albert H., and Edward Foster, Leamington, Ontario, Canada. Washing-machine .....	Sept. 17, 1878	666	196	14	443
205, 416	Randall, Delano P., Smith Road, Ohio. Animal-poke .....	July 23, 1878	907	258	14	136
201, 830	Randall, Francis D., and Lester D. Dana, Waupaca, Wis. Grinding-machine .....	June 25, 1878	1066	315	13	1164
209, 713	Randall, Frank John, Aurora, Ill. Corn harvester and husker .....	Mar. 26, 1878	1056	322	13	586
198, 953	Same..... Door-spring .....	Nov. 5, 1878	190	56	14	706
201, 944	Randall, Isaac, Milwaukee, Wis. Advertising medium .....	Jan. 8, 1878	243	70	13	53
199, 862	Randall, Isaac H., Boston, Mass. Car-axle box .....	Apr. 2, 1878	82	23	13	611
200, 219	Randall, Jehu P. (See Hill, Russell S., assignor.) Randall, John C., assignor of one-half interest to A. N. and Y. M. Edwards, Sulphur Springs, Tex. Horse-power .....	Jan. 29, 1878	1193	350	13	217
208, 267	Randall, Squire J., and James O'Brien, Port Ludlow, Wash. Insertible saw-teeth .. Randle, Heath & Livermore. (See Bettis & Heath, assignors.) Randolph, John Hampden, jr., Woodstock Plantation, La. Revolving horse hay-rake ..	Feb. 12, 1878 Sept. 24, 1878	332 759	100 222	13 14	293 457
201, 198	Randolph, Robert J. (See Bassett, Richard A., assignor.) Randolph, Simon P., Seattle, Wash., assignor to Lane & Bodley Company, Cincinnati, Ohio. Gang-edger .....	Mar. 12, 1878	378	117	13	479
199, 106	Randolph, Theodore F., Morristown, N. J. Ditching-machine .....	Jan. 8, 1878	389	{ 116 117 }	13	77
199, 379	Range, Hercule N., Philadelphia, Pa., assignor of one-half interest to William H. Frasier, Chicago, Ill. Lapping-machine .....	Jan. 22, 1878	691	203	13	131
	Rankin, David. (See Baron, Cash & Rankin.) Same..... (See Cash & Baron, assignors) .....					
	Same..... same. (Reissue.) Rankin, David, <i>et al.</i> (See Baron, Alfred L., assignor.) Same..... (See Cash, Evan F., assignor.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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205, 135	Rankin, William H., Elizabeth, N. J. Saturated sheathing for roofing .....	June 18, 1878	756	.....	13	1119
207, 775	Rankin, William H., Monticello, Ark. Blower for blacksmiths' forges .....	Sept. 3, 1878	194	59	14	373
203, 499	Rankins, William L., Paris, Ky. Convertible car-truck .....	May 7, 1878	275	79	13	858
	Ranney, Hiram H., <i>et al.</i> (See Kingsbury, Andrew B., assignor.)					
	Ranney, Warren, <i>et al.</i> (See Kingsbury, Andrew B., assignor.)					
	Ransdell, John S. (See Lee & Ransdell.)					
209, 984	Ransford, Henry, Brighton, England. Apparatus for the manufacture of salt .....	Nov. 19, 1878	498	151	14	755
206, 687	Ransom, Martin, Chicago, Ill. Button and stud .....	Aug. 6, 1878	34	10	14	211
203, 773	Ransom, Newman A., Chicago, Ill. Fare-register and ticket-receiver .....	May 14, 1878	575	162	13	905
	Ransom Stove Works. (See Hamlin, Charles A., assignor.)					
199, 743	Ransom, Theodore S., Somerville, Mass. Enamel-coated knife and fork handle .....	Jan. 23, 1878	1081	.....	13	200
206, 404	Ransome, Allen, Enkeston, Clapham Common, England. Drag-sawing machine .....	July 30, 1878	1094	313	14	163
	Ranson, Thomas W. (See Gardner & Ranson) .....					
	(Reissue.)					
201, 945	Rantz, Jacob C., Minooka, Ill. Railway-switch .....	Apr. 2, 1878	82	23	13	611
203, 647	Raoul, William Green, Macon, Ga. Air-brake .....	May 14, 1878	443	126	13	888
208, 847	Rape, William M., Notasulga, Ala. Seed-planter .....	Oct. 8, 1878	426	124	14	553
209, 291	Same. .... Wagon-brake .....	Oct. 22, 1878	921	268	14	628
	Raplee, Sylvester W. (See Sues & Raplee.)					
203, 293	Rapp, Christian F., Cincinnati, Ohio. Reversible hinge .....	May 7, 1878	62	19	13	828
210, 211	Same. .... Slate .....	Nov. 26, 1878	756	224	14	793
202, 051	Rarick, Benjamin F., William P., and Jonas, Lincoln Township, Republic County, Kans. Trash-gatherer .....	Apr. 2, 1878	191	55	13	626
	Rarick, Jonas. (See Rarick, Benjamin F., William P., and Jonas.)					
	Rarick, William P. (See Rarick, Benjamin F., William P., and Jonas.)					
199, 993	Rasey, John D., Fond du Lac, assignor to self and O. F. Swift, Oshkosh, Wis. Refrigerator .....	Feb. 5, 1878	101	33	13	249
	Ratcliff, F. (See Berry, Henry, assignor.)					
201, 831	Ratcliff, Frederick, Meriden, Conn. Calendar-inkstand .....	Mar. 26, 1878	1059	323	13	587
203, 939	Ratcliff, Frederick, Meriden, assignor to Derby Silver Company, Derby, Conn. Flower-vase .....	May 21, 1878	760	219	13	998
204, 608	Ratcliff, Frederick, West Meriden, Conn. Lamp .....	June 4, 1878	182	58	13	1034
204, 451	Rate, Edward F., Cedar Bluff, Iowa. Corn-husking implement .....	June 4, 1878	35	11	13	1017
202, 756	Rath, Edward H. T. C., Newark, N. J. Copying-press .....	Apr. 23, 1878	984	283	13	747
	Rathbone, Sard & Co. (See Oliver, Robert S., assignor.)					
	Same. .... (See Sard, Grange, jr., assignor.)					
202, 119	Rathbun, Charles B. (See Hull, Nicholas A., assignor.)					
201, 287	Rathbun, Charles R., and Frederick W. Adams, Worcester, Mass. Sand-paper roll .....	Apr. 9, 1878	279	82	13	643
205, 136	Rathbun, Stephen B., Dundee, Mich. Rotary churn-dasher .....	Mar. 12, 1878	477	146	13	492
	Rathmann, Henry, Buffalo, N. Y. Soap-frame .....	June 18, 1878	756	{ 224 225 }	13	1119
207, 066	Rau, Adolph H., assignor of one-third interest to D. Schilling, San Francisco, Cal. Lawn-mower .....	Aug. 13, 1878	423	131	14	262
204, 373	Rausch, Leonard, New York, N. Y. Rocking-chair .....	May 28, 1878	1242	353	13	1000
210, 359	Ravenel, St. Julien, assignor to Paul S. Felder, Charleston, S. C. Excavating and dredging machine .....	Nov. 26, 1878	919	269	14	814
	Rawe, William H. (See Massey & Rawe.)					
210, 360	Rawlings, Joseph W. V., assignor to self and Richard Uren, Houghton, Mich. Mill for pulverizing ores .....	Nov. 26, 1878	920	269	14	814
204, 843	Rawlings, William Joshua, assignor to self, Frank Brinkman, and Andrew Brinkman, Ottawa, Ohio. Jointed brace for vehicle-spring .....	June 11, 1878	443	130	13	1074
206, 612	Rawson, George W., Belleville, Ill. Switch-head chair .....	July 30, 1878	1312	377	14	196
204, 088	Rawson, Smith E. G., Saratoga Springs, N. Y. Suspensory-bandage .....	May 21, 1878	922	263	13	956
205, 417	Ray, George W., Watson, Mo. Wheel cultivator .....	June 25, 1878	1067	316	13	1165
	Ray, James. (See Fox, Nathan, assignor.)					
207, 067	Raymond, Charles F., Birmingham, Ala. Lubricator .....	Aug. 13, 1878	424	131	14	262
200, 089	Raymond, Daniel R., Osceola, Iowa. Cultivator .....	Feb. 5, 1878	291	63	13	264
	Raymond, 2d, F. F., <i>et al.</i> (See McDonald, James W., assignor.)					
208, 122	Raymond, George N., and George B. Perkins, Bridgeport, Conn. Hose-nozzle .....	Sept. 17, 1878	586	174	14	432
209, 585	Same. .... Coin-holder .....	Nov. 5, 1878	49	14	14	687
206, 827	Raymond, Henry V., and George H. Chinnoek, Brooklyn, N. Y. Automatic device for advertising .....	Aug. 6, 1878	172	54	14	228
	Raymond, J. B. (See Bloom, Hans Olsen, assignor.)					
201, 832	Raymond, James P., Cincinnati, Ohio. Manufacture of paper bags .....	Mar. 26, 1878	1060	323	13	587
201, 892	Raymond, Silas H., Grand Rapids, Mich. Device for splicing carriage-shafts .....	Apr. 2, 1878	33	9	13	603
199, 380	Raymond, William F., Brooklyn, assignor to self, Charles A. Allen, New York, and Austin G. Foster, Seneca Falls, N. Y. Force-pump .....	Jan. 22, 1878	692	203	13	132
	Rayne, R. W. (See Seaver, George A., assignor) .....					
	(Reissue.)					
204, 374	Rayner, John B., and Eugene G. Burr, Springfield, Mass. Sash balance and lock .....	May 28, 1878	1243	353	13	1000
208, 848	Rea, John H. B., Trion Factory, Ga. Fertilizer-distributor .....	Oct. 8, 1878	427	124	14	553
199, 744	Read, Calvin D., Ayer, Mass. Corn-sheller .....	Jan. 29, 1878	1081	317	13	201
200, 340	Read, Daniel M., and Louis Prahar, New York, N. Y. Pocket-book frame .....	Feb. 12, 1878	460	136	13	311
8, 408	Same. .... same. .... (Reissue.)	Sept. 10, 1878	461	139	14	411
203, 774	Read, Henry F., Brooklyn, N. Y. Wrench attachment .....	May 14, 1878	578	162	13	905
209, 934	Read, Luther, assignor to self and Lorin B. Simmons, Henderson, N. Y. Center-board for vessels .....	Mar. 5, 1878	111	38	13	432
207, 894	Read, Willis, Danbury, Conn. Water-wheel .....	Sept. 10, 1878	337	101	14	394
	Reagin, James. (See Hazlewood & Reagin.)					
	Ream, John. (See Karns & Ream.)					
209, 292	Reaser, Warren T., Chicago, Ill. Syringe .....	Oct. 22, 1878	921	269	14	629
	Rebasz, Lyman A. (See Lillis & Rebasz.)					
208, 926	Rebhun, Charles, Butler, Pa. Window-frame .....	Oct. 15, 1878	520	151	14	570
	Reckendorfer, Joseph. (See Boman, Claes W., assignor.)					
	Same. .... (See Hoffman & Boman, assignors.)					
	Same. .... (See Hoffman, Joseph, assignor.)					
	Same. .... (See Walpuski, Charles, assignor.)					
206, 261	Record, George J., <i>et al.</i> (See Wade, Sedgwick M., assignor.)	July 23, 1878	908	258	14	136
210, 961	Record, George John, Conneaut, Ohio. Cover for butter-packages and other vessels .....	Dec. 17, 1878	648	180	14	924
	Record, Solomon W., Kennebunk, Me. Mold for boot and shoe stiffeners .....					
	Records, Benjamin W. (See Dixon & Records.)					
205, 574	Rector, Homer T., Clinton, Mich. Plow-clearer .....	July 2, 1878	120	35	14	24
203, 648	Redd, William M., and Erastus M. Sadford, Dunleith, Ill. Grain-separator .....	May 14, 1878	444	126	13	888
207, 623	Reden, Peter, and Bernard Thole, Saint Louis, Mo. Process and compound for preserving eggs .....	Sept. 3, 1878	39	.....	14	354
210, 434	Redett, William, Fredericksburg, Ohio. Stove-pipe elbow .....	Dec. 3, 1878	45	11	14	690
	Redlich & Schnitzler. (See Gordon, Jacob, assignor.)					

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
208, 335	Redmond, Charles C., assignor of three-fourths interest to Archibald W. White and Richard D. Berry, San José, Cal. Cooling-faucet for beer-barrels	Sept. 24, 1878	828	242	14	466
205, 575	Redmond, Charles Clawson, assignor of one-half interest to William H. Henderson, San José, Cal. Weighing attachment for pen and pencil holders	July 2, 1878	120	35	14	24
210, 804	Redway, Albert J., Avondale, assignor to Redway & Burton, Cincinnati, Ohio. Dumping-grate for stoves and furnaces	Dec. 10, 1878	453	128	14	892
	Redway & Burton. (See Peet, John T., assignor.)					
	Same. (See Redway, Albert J., assignor.)					
	Reed, Abraham. (See Daniels & Reed.)					
	Reed & Barton. (See Parkin, William, assignor.)					
	Reed, Charles, et al. (See Varns, Harvey B., assignor.)					
	Same. (See Welch, Rosia W., assignor.)					
200, 341	Reed, Charles D., Polo, Ill. Gate	Feb. 12, 1878	461	136	13	312
	Reed, Charles F. (See Reed, Jeremiah W. and Charles F.)					
209, 514	Reed, Cullin W., Chagrin Falls, Ohio. Steam-boiler and furnace	Oct. 29, 1878	1164	338	14	667
201, 946	Reed, Dewitt C., Kalamazoo, Mich. Harrow	Apr. 2, 1878	83	24	13	611
	Reed, Edward F. (See Macy & Reed.)					
205, 505	Reed, Edward F., Chelsea, Mass. Vapor-burner	July 2, 1878	43	13	14	14
	Reed, George B., et al. (See Maddocks, Nelson P., assignor.)					
199, 933	Reed, James C., De Witt, Iowa. Measuring-caddy	Feb. 5, 1878	45	15	13	240
206, 262	Reed, Jeremiah W. and Charles F., De Graff, Ohio. Hog-trap	July 23, 1878	909	258	14	136
202, 192	Reed, John Richard, Westfield, Mass. Steam-radiator	Apr. 9, 1878	358	105	13	653
	Reed, John V. D. (See McMary, William H., assignor.)					
	Reed, John Van Deusen. (See Vose, Richard, assignor.)					
199, 224	Reed, Joseph Warren, Kalamazoo, Mich. Lubricator	Jan. 15, 1878	526	155	13	98
203, 371	Reed, Josiah, Troy, Ohio. Carbureter	May 7, 1878	142	41	13	840
210, 212	Reed, Lafayette H., Brattleborough, Vt. Horse-detacher	Nov. 26, 1878	757	225	14	793
8, 501	Reed, Louis, New York, N. Y., assignor, by mesne assignments, to Louis Reed & Co. Barrel-hoop	Nov. 19, 1878	717	214	14	784
	Reed & Co., Louis. (See Reed, Louis, assignor.) (Reissue.)					
207, 132	Reed, Samuel, Cincinnati, Ohio. Clothes-rack	Aug. 20, 1878	507	153	14	277
	Reed, Thomas L. (See Morris, Henry, assignor.)					
	Same. (See Rounds & Reed.)					
200, 569	Reed, Thomas L., assignor of one-half interest to Eugene F. Phillips, Providence, R. I. Electric conductor for elevator-annunciators, &c.	Feb. 19, 1878	696	205	13	356
	Reed, William F. (See Howell, Francis A., assignor.)					
200, 568	Reed, William H., Chicago, Ill. Carbureter	Feb. 19, 1878	695	204	13	356
203, 775	Reed, William S., Leominster, Mass. Toy	May 14, 1878	580	162	13	905
203, 776	Same. same	May 14, 1878	580	163	13	905
207, 819	Rees, Darius A., Joliet, Ill. Car-brake	Sept. 10, 1878	249	78	14	384
201, 124	Rees, Eli, Merced, Cal. Shoe-fastening	Mar. 12, 1878	310	95	13	468
202, 120	Rees, Horace A., Lowville, N. Y. Butter-mold	Apr. 9, 1878	280	82	13	643
202, 583	Rees, Jacob H., Hawthorn, Tenn. Hog-cholera compound	Apr. 16, 1878	784		13	714
203, 940	Rees, James, Pittsburg, Pa. Construction of ships	May 21, 1878	761	219	13	936
	Rees, John, et al. (See Rosewarne, William H., assignor.)					
	Rees, Thomas, et al. (See Acheson, William, assignor.)					
	Rees, William M. (See Campbell & Richards, assignors.)					
208, 539	Reesch, Carl F. A., Washington, D. C. Game-table	Oct. 1, 1878	83	24	14	500
202, 757	Reese, Charles, Baltimore, Md. Table-cutlery	Apr. 23, 1878	985	283	13	748
203, 192	Reese, George and Paul, New Albany, Ind. Plow	Apr. 30, 1878	1441	421	13	810
200, 700	Reese, George F., Brooklyn, N. Y. Dental-plate mold	Feb. 26, 1878	910	268	13	396
200, 761	Same. Making molds for dental plates	Feb. 26, 1878	912		13	396
	Reese, Paul. (See Reese, George and Paul.)					
	Reeve, Augustus, et al. (See Bensel, Jacob, assignor.)					
202, 584	Reeves, James E., Saint Joseph, Mo. Holdback for double harness	Apr. 16, 1878	785	226	13	714
203, 193	Rehbein, John, Honesdale, Pa. Churn	Apr. 30, 1878	1442	421	13	810
200, 090	Reh fuss, George, assignor to American Button Hole Overseaming and Sewing Machine Company, Philadelphia, Pa. Retainer for sewing-machine attachments	Feb. 5, 1878	201	63	13	264
205, 904	Same. Sewing-machine	July 9, 1878	490	140	14	74
209, 075	Same. Tuck-marker for sewing-machines	Oct. 15, 1878	688	199	14	592
201, 447	Reichenbach, Adolf, Limbach, assignor to Gustav H. Neumann, Oderan, near Chemnitz, Saxony. Knitting-machine	Mar. 19, 1878	657	200 } 201 }	13	525
210, 962	Reicherts, John J., and David Tipton, Delaware, Ohio. Combined field roller and planter	Dec. 17, 1878	649	189	14	924
202, 193	Reid, John, Brooklyn, assignor to J. L. Mott Iron Works, New York, N. Y. Swing-basin and urinal	Apr. 9, 1878	359	105	13	653
203, 941	Reid, John, Crestline, Ohio. Drinking-fountain	May 21, 1878	761	219	13	936
206, 484	Reid, John, Brooklyn, assignor to J. L. Mott Iron Works, New York, N. Y. Bidet water-closet	July 30, 1878	1178	338	14	173
207, 983	Reid, Louis H., Washington, N. C. Carbureting apparatus	Sept. 10, 1878	429	129	14	407
199, 745	Reid, Samuel, Chicago, Ill. Lubricator for steam-engines	Jan. 29, 1878	1082	317	13	201
207, 895	Reid, William Gregg, assignor to self and James M. Ivy, Rock Hill, S. C. Plow	Sept. 10, 1878	338	102	14	395
207, 984	Reiff, Jacob D., Skippackville, Pa. Governor for horse-powers	Sept. 10, 1878	430	130	14	407
210, 267	Reiff, William H., New Haven, assignor of one-half interest to George S. Curtis, Bridgeport, Conn. Toy torpedo	Nov. 26, 1878	814	241	14	801
8, 308	Reilly, Hugh, Brooklyn, N. Y. Projectile for ordnance	June 25, 1878	1124	332	13	1172
201, 631	Same. Bag	Mar. 26, 1878	863	263	13	557
	Reilly, John B. (See Lochner, August, assignor.)					
206, 613	Reilly, Robert P., and Walter P. Speller, New York, N. Y. Turnstile-register	July 30, 1878	1314	378	14	190
206, 828	Reimann, Carl, Wittenberge, assignor to Conrad L. Strube, Buchau, North Germany. Spark-extinguisher	Aug. 6, 1878	173	55	14	228
205, 905	Reimer, John Jacob, Hoboken, N. J. Machine for bending horseshoes	July 9, 1878	490	140	14	74
205, 978	Same. Die for finishing horseshoes	July 16, 1878	583	167	14	91
202, 375	Reinherr, Fredrick, Munich, Bavaria, Germany. Locomotive-boiler furnace	Apr. 16, 1878	564	165	13	686
204, 609	Reinhard, John F., New York, N. Y. Receptacle for liquors, acids, and oils	June 4, 1878	183	59	13	1038
207, 303	Reinhard, William, Eau Claire, Wis. Carriage-wheel hub	Aug. 20, 1878	682	203	14	299
200, 762	Reisinger, James W. H., Meadville, Pa. Book and cover	Feb. 26, 1878	912	268	13	396
205, 137	Same. Blank book	June 18, 1878	758	225	13	1120
206, 485	Reiss, Hans, Jersey City, N. J. Work-support for metal-turning lathes	July 30, 1878	1178	338	14	174
	Reistle, Charles. (See Hinrichs & Reistle.)					
	Reitz, Andrew. (See Westwood, John T., assignor.)					
	Reitz, Baltzer K. (See Risser & Lang, assignors.)					
201, 288	Rekart, Adam, Jennings Township, Putnam County, Ohio. Gate	Mar. 12, 1878	479	146	13	493



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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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200, 342	Rolph, Francis H., assignor to self and A. M. Underhill, New York, N. Y. Apparatus for bagging grain.	Feb. 12, 1878	462	136	13	312
206, 898	Remillon, Eugene J., assignor to John H. Schreiner, Philadelphia, Pa. Railway-spike.	Aug. 13, 1878	268	81	14	243
8, 524	Remington, George H. (See Remington, George W., assignor.)					
204, 089	Remington, George H., and Joseph P. Manton, Providence, R. I., assignors to American Ship Windlass Company. Locking-gear for windlasses. (Reissue.)	Dec. 17, 1878	798	219	14	941
	Remington, George W., Exeter, assignor of one-half interest to George H. Remington, Providence, R. I. Carriage-wrench.	May 21, 1878	923	264	13	956
208, 494	Remington, Horatio A. (See Colvin & Remington.)					
	Remington, Horatio A. River Point, R. I. Clutch.	Oct. 1, 1878	39	12	14	494
203, 777	Remsen, C. E., et al. (See Phillips, William C., assignor.)					
206, 899	Renetzky, Augustus, Lincoln, Ill. Ditching-machine.	May 14, 1878	581	163	13	905
199, 994	Renner, Francis C., New Midway, Md. Door-alarm.	Aug. 13, 1878	269	82	14	243
	Reno, William Lafayette, assignor to self, and, by mesne assignments, to Elijah M. Witter, West Jefferson, Ohio. Horse hay-rake.	Feb. 5, 1878	102	33	13	249
200, 343	Renshaw, George, East Palestine, Ohio. Dinner-bucket.	Feb. 12, 1878	463	137	13	312
	Renshaw, Lydia F. (See Tower, George B. N., assignor.)					
210, 559	Rentchler, Henry. (See Morgan, Elias M., assignor.)					
209, 714	Renwick, Edward Sabine, Millburn, N. J. Regulating mechanism for incubators, &c.	Dec. 3, 1878	181	48, 49	14	847
	Renwick, Henry B., New York, N. Y., assignor to George Crompton, Worcester, Mass. Shuttle-box mechanism for looms.	Nov. 5, 1878	191	57	14	706
210, 268	Replogle, Jacob M., Farragut, Iowa. Mill-spindle.	Nov. 26, 1878	815	241	14	801
200, 763	Repp, Elias, Menomonee, Wis. Device for hitching horses to vehicles.	Feb. 26, 1878	913	268	13	396
209, 921	Requa, Elias B., Jersey City, N. J. Lantern.	Nov. 12, 1878	416	125	14	741
	Requa, Elizabeth. (See Andrews, Abram W., assignor.)					
199, 469	Requa, Josephus, Rochester, N. Y. Hand-piece for dental engines.	Jan. 22, 1878	777	228	13	145
	Resor & Co., William. (See Truesdale, Charles, assignor.)					
209, 085	Rettig, Albert. (See Rettig, George, assignor.)					
	Rettig, George, assignor of one-half interest to Albert Rettig, Chicago, Ill. Device for closing the end-flaps of coin-wrappers.	Nov. 19, 1878	499	151	14	755
208, 849.	Renter, Gustav S., Sonoma, Cal. Barley and malt drier.	Oct. 8, 1878	428	124	14	553
	Rex & Bockins. (See Tyson, Charles, assignor.)					
8, 304	Reyburn, William S. (See Vermilya, Reyburn & Hunter.)					
	Reyburn, William S., and Edmond A. W. Hunter, Philadelphia, Pa.; said Hunter assignor of one-half interest to Byron P. Moulton. Coupling for lightning-rods. (Reissue.)	June 25, 1878	1120	331	13	1172
210, 963	Reynolds, Asa R., New York, N. Y. Treating fire-brick and similar material used for metallurgic purposes.	Dec. 17, 1878	651	.....	14	925
210, 964	Same. Decarbonized malleable cast-iron.	Dec. 17, 1878	652	180	14	925
209, 421	Reynolds, Augustus H., Prophetstown, Ill. Toe-weight for horses.	Oct. 29, 1878	1064	309	14	652
211, 049	Reynolds, Bascomb H. (See Spain & Reynolds.)					
	Reynolds, Benjamin F., and Charles D. Wiley, Verona, Pa. Sash-holder.	Dec. 17, 1878	764	210	14	937
211, 050	Reynolds & Co. (See Reynolds, Henry, assignor.)					
199, 893	Reynolds, David B., Bellefontaine, Ohio. Metallic binder for books.	Dec. 17, 1878	765	210	14	937
201, 833	Reynolds, Edmund D. and Oliver B., Brockton, Mass. Wheel-hub.	Jan. 29, 1878	1194	350	13	218
209, 293	Same. Horse hay-rake.	Mar. 26, 1878	1061	323	13	587
208, 990	Same. Corn-planter.	Oct. 22, 1878	922	269	14	629
208, 850	Reynolds, Freeman F., Villa Rica, Ga. Washing-machine.	Oct. 15, 1878	585	170	14	578
	Reynolds, George H., assignor of two-thirds interest to Cornelius H. Delameter and George H. Robinson, New York, N. Y. Support for ropes for transmitting power.	Oct. 8, 1878	428	124	14	554
204, 375	Reynolds, George L., Oakland Township, Alameda County, Cal. Window-screen.	May 28, 1878	1244	354	13	1001
8, 252	Reynolds, Harvey A., New York, N. Y., assignor to Henry M. Richardson and George McKee. Velocipede. (Reissue.)	May 28, 1878	1284	366	13	1065
198, 856	Reynolds, Henry, assignor to Reynolds & Co., New Haven, Conn. Molding-machine.	Jan. 1, 1878	135	38	13	29
203, 778	Same. same.	May 14, 1878	582	163	13	905
206, 614	Reynolds, Henry S., Green Point, N. Y. Coal-hod.	July 30, 1878	1315	378	14	190
	Reynolds, Hiram. (See Brunner & Reynolds.)					
203, 779	Reynolds, Hiram, Marshalltown, Iowa. Fence-barb.	May 14, 1878	584	163	13	906
8, 039	Reynolds, Ira, assignor to self and Lucius D. Reynolds, Dayton, Ohio. Book-binding. (Reissue.)	Jan. 15, 1878	653	191	13	117
8, 056	Reynolds, Ira, Dayton, Ohio, assignor to self and L. D. Reynolds. Book-binding. (Reissue.)	Jan. 22, 1878	948	275	13	172
199, 572	Reynolds, Ira, assignor to Reynolds & Reynolds, Dayton, Ohio. Removable book-binding.	Jan. 22, 1878	884	259 } 260 }	13	162
201, 450	Same. Book-binding.	Mar. 19, 1878	662	201	13	525
	Reynolds, John B. (See Baker, Charles H., assignor.)					
	Same. (See Dennis, Samuel W., assignor.)					
	Same. (See Moreau & Dennis, assignors.)					
	Reynolds, John R. (See Stannard & Reynolds.)					
210, 711	Reynolds, L. D. (See Reynolds, Ira, assignor.) (Reissue.)					
	Reynolds, Lucius Delmar, assignor to Reynolds & Reynolds, Dayton, Ohio. Book-cover protector.	Dec. 10, 1878	355	97	14	878
	Reynolds, Oliver B. (See Reynolds, Edmund D. and Oliver B.)					
	Reynolds & Reynolds. (See Reynolds, Ira, assignor.)					
	Same. (See Reynolds, Lucius Delmar, assignor.)					
205, 764	Reynolds, William L., et al. (See Thomas, David, assignor.)					
8, 409	Reynolds, William L., and Calvin Haskell, Saint Louis, Mo. Manufacture of wire.	July 9, 1878	339	.....	14	55
	Reynolds, William M., New York, N. Y., assignor to Samuel S. White, Philadelphia, Pa. Dental drill. (Reissue.)	Sept. 10, 1878	461	139	14	411
198, 778	Reynolds, William N. (See Chalmers & Reynolds.)					
209, 076	Reynolds, Samuel F., Auburn, N. Y. Combined land-roller, harrow, and grain-drill.	Jan. 1, 1878	60	15	13	17
	Reznor, George, Mercer, Pa., assignor of one-half interest to Richard R. Wight. Air-carbureter.	Oct. 15, 1878	689	200	14	592
199, 468	Rheubottom, James R., Weedsport, N. Y. Chain-lock for valves.	Jan. 22, 1878	776	228	13	145
209, 775	Rheutan, Abram A., Worcester, Mass. Piano-forte pedal.	Nov. 12, 1878	268	80	14	721
211, 051	Rheutan, Garrio H., assignor to Henry B. Beach, Hartford, Conn. Feed-water heater.	Nov. 17, 1878	766	210	14	837
202, 585	Rhind, Frank, Brooklyn, N. Y., assignor of one-half interest to Fred. A. Lehmann, Washington, D. C. Oil-chandelier.	Apr. 16, 1878	785	226 } 227 }	13	714
209, 077	Rhind, Frank, Brooklyn, N. Y., assignor to Edward Gove. Lamp-bowl.	Oct. 15, 1878	690	200	14	592
209, 078	Same. Self-extinguishing lamp.	Oct. 15, 1878	691	200	14	592
210, 878	Rhind, Frank, Brooklyn, N. Y. Lamp-extinguisher.	Dec. 17, 1878	548	154	14	912
203, 194	Rhoades, Stephen H., Pittston, Pa. Apparatus for storing and discharging liquids.	Apr. 30, 1878	1443	421	13	811
204, 610	Same. Apparatus for storing and discharging oil.	June 4, 1878	185	59	13	1038
202, 586	Rhoades, William G., Philadelphia, Pa. Flushing-box for water-closets.	Apr. 16, 1878	786	227	13	714
203, 071	Same. Water-closet.	Apr. 30, 1878	1313	382	13	794



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210, 965	Rhoades, William G., Philadelphia, Pa. Siphon	Dec. 17, 1878	654	181	14	925
	Rhode, William. (See Ridgway, George, assignor.)					
	Rhodes, C. W. (See Downs, Herman G., assignor.)					
203, 291	Rhodes, Charles E., New Orleans, La. Mosquito-bar frame	May 7, 1878	60	19	13	828
199, 995	Rhodes, David, Fredericktown, Mo. Harrow	Feb. 5, 1878	102	34	13	249
208, 424	Rhodes, Isaac M., Hancock, Mich. Butter-cutter	Sept. 24, 1878	921	270	14	478
209, 079	Same..... Treadle-power	Oct. 15, 1878	692	200	14	592
310, 361	Same..... Gate	Nov. 26, 1878	921	269	14	814
	Rhoner, Frank. (See Willershausen & Rhoner.)					
203, 294	Rhoner, Frank, and Siegfried Willershausen, New York, N. Y. Rocking-chair	May 7, 1878	63	19	13	828
205, 300	Rhyneason, George W., Cincinnati, Ohio. Cigar bundler and binder	June 25, 1878	943	280	13	1149
207, 682	Ribble, Francis James, Campbellsport, Wis. Ratchet-wheel and pawl mechanism for rotating shafts by treadle-power	Sept. 3, 1878	98	29	14	361
207, 068	Rice, Abram, Lycippus, Pa. Car-coupling	Aug. 13, 1878	425	132	14	262
200, 802	Rice, Adolph B., Brooklyn, N. Y. Hat and bonnet box	Feb. 26, 1878	950	280	13	402
205, 138	Same..... Embroidery-pattern	June 18, 1878	760	225	13	1120
	Rice, Alfred L. (See Rice, George M., jr., and Alfred L.)					
	Rice, Barton & Fales Machine and Iron Company. (See Clement, Nathan S., assignor.)					
204, 844	Rice, Bernard, Brooklyn, N. Y. Blender for horses	June 11, 1878	444	130	13	1074
201, 893	Rice, Charles R., Somerville, assignor of one-fourth interest to Winfield S. Choate, Augusta, Me. Vehicle-brake	Apr. 2, 1878	34	10	13	603
202, 868	Rice, David, and George K. Childs, Philadelphia, Pa. Stretcher and wheeled frame	Apr. 23, 1878	1105	317	13	763
204, 758	Rice, Edward, Providence, R. I. Spool-holder	June 11, 1878	348	105	13	1064
200, 843	Rice, Eli B., Madison, Wis. Spring-motor	Mar. 5, 1878	30	11	13	419
201, 835	Rice, Eliakim, Cazenovia, N. Y. Tape-holder	Mar. 26, 1878	1063	324	13	587
207, 304	Rice, Francis, Greigsville, N. Y. Wagon pole and shaft	Aug. 20, 1878	683	203	14	299
	Rice, Francis S. (See Wetmore & Rice.)					
198, 779	Rice, Fred B., Dunkirk, N. Y. Balanced valve for steam-engines	Jan. 1, 1878	61	15	13	17
	Rice, George H. (See Sherwood, Norman B., assignor.)					
210, 052	Rice, George H., Brooklyn, N. Y. Rotary sign	Nov. 19, 1878	571	171	14	764
205, 139	Rice, George M., jr., and Alfred L., Worcester, Mass. Separating animal from vegetable fibers	June 18, 1878	761	.....	13	1120
201, 947	Rice, Henry C., Louisiana, Mo. Filter and clarifier for tea, coffee, &c	Apr. 2, 1878	84	24	13	611
204, 683	Same..... Coffee pot and strainer	June 11, 1878	267	83	13	1053
	Rice, Isaac M. (See Root, Corydon A., assignor.)					
	Rice, Joseph M. (See Vaile, Charles H., assignor.)					
201, 948	Rice, Mathew, Augusta, Ga. Cutting and boring attachment for lathes	Apr. 2, 1878	84	24	13	611
207, 207	Same..... Carving-machine	Aug. 20, 1878	584	175	14	286
204, 505	Rice, Moses M., and Jesse Labar, Slatington, Pa. Desk slate-holder	June 4, 1878	79	27	13	1024
	Rice, Robert M. (See Cunningham, Winhofer & Rice.)					
204, 376	Rice, Thomas Brown, jr., Medora, Ill. Field-roller	May 28, 1878	1244	354	13	1001
210, 260	Rice, William R., Bridgeport, Conn. Decorated felt hat	Nov. 26, 1878	816	242	14	801
210, 270	Same..... Method of manufacturing felt for hats	Nov. 26, 1878	817	242	14	801
	Rich, Alexander. (See Bruner & Rich.)					
203, 500	Rich, Dealton G., assignor to self and Morgan L. Rich, Sand Bank, N. Y. Milking-pail	May 7, 1878	275	79	13	858
	Rich, Elizabeth, administratrix, et al. (See Morrison, George W., assignor.)					
	Rich, Morgan L. (See Rich, Dealton G., assignor.)					
201, 834	Rich, Shebnah, Boston, assignor to William W. Treat, Watertown, Mass. Preserving together cured fish and potatoes	Mar. 26, 1878	1062	.....	13	587
201, 448	Rich, Wesley M., Rome, N. Y. Molasses sampling glass	Mar. 19, 1878	659	201	13	525
210, 630	Richard, Jean E., New York, N. Y. Ladder	Dec. 10, 1878	273	74	14	868
202, 869	Richard, Jean Elie, New York, assignor of one-half interest to John S. Hulin, Brooklyn, N. Y. Ventilator for houses	Apr. 23, 1878	1106	317	13	763
205, 418	Same..... Ventilator	June 25, 1878	1068	316	13	1165
201, 199	Richards, Alfred S., Grand Rapids, Mich. Saw-mill head-block	Mar. 12, 1878	379	117	13	479
199, 934	Richards, Charles, assignor of one-half interest to Leo W. Sapp, Cleveland, Ohio. Fire-escape	Feb. 5, 1878	46	15	13	240
190, 864	Richards, Edward K., Cambridge, Mass. Separating saccharine matter from air	Jan. 29, 1878	1194	351	13	218
206, 263	Same..... Measuring and discharging apparatus for bone-black furnaces	July 23, 1878	909	259	14	136
202, 922	Richards, George Benjamin, Prairieville, Mich. Churn and washing-machine	Nov. 12, 1878	418	125	14	741
202, 587	Richards, Henry Eugene, assignor of two-thirds interest to Julius F. and Marcus C. } Richards, Oswego, Ill. Door-hanger	Apr. 16, 1878	788	227	13	714
203, 854	Richards, Henry Eugene, Oswego, Ill. Exhibitor for cordage	May 21, 1878	672	190	13	924
	Richards, Isaac. (See Stevens, William, assignor.)					
201, 289	Richards, Jackson, Philadelphia, Pa. Lubricator	Mar. 12, 1878	479	147	13	493
	Richards, James F. (See Campbell & Richards.)					
8, 297	Richards, John, assignor to J. A. Fay & Co., Cincinnati, Ohio. Wood-planing machine. (Reissue)	June 25, 1878	1111	329	13	1171
200, 477	Richards, Joseph Dudley, Boston, Mass. Cabinet-portfolio	Feb. 19, 1878	606	178	13	342
	Richards, Julius F., et al. (See Richards, Henry Eugene, assignor.)					
204, 611	Richards, Marcus C., assignor of two-thirds interest to H. W. Farley and D. M. Haight, Oswego, Ill. Shipping-package	June 4, 1878	186	59	13	1039
	Richards, Marcus C., et al. (See Richards, Henry Eugene, assignor.)					
	Richards, Samuel. (See Peiffer & Richards.)					
	Richardson, Albert E. (See Wells, Richardson, Van Patten & Wells.)					
208, 540	Richardson, Charles, Cheltenham Township, Montgomery County, Pa., assignor to Walton, Whann & Co., Wilmington, Del. Fertilizer	Oct. 1, 1878	84	.....	14	500
	Richardson, Charles A. (See Twitchell & Richardson.)					
206, 041	Richardson, Elton F., Reading, Mass. Boot and shoe	July 16, 1878	643	187	14	99
206, 688	Richardson, Elton F., Reading, Mass. Machine for cutting threads on wires	Aug. 6, 1878	35	10	14	211
207, 820	Richardson, Fred W., Troy, N. Y. Safety-valve	Sept. 10, 1878	249	78	14	384
198, 998	Richardson, George B., Boston, Mass. Salt and spice bottle	Jan. 8, 1878	290	85	13	60
	Richardson, Gordon M. (See Richardson, Merriek A. and Gordon M.)					
	Richardson, Henry M., et al. (See Reynolds, Harvey A., assignor.)					
203, 942	Richardson, Herbert W., Philadelphia, Pa. Street-sweeping machine	May 21, 1878	762	220	13	936
200, 844	Richardson, James G., Cambridgeport, Mass. Fire-escape	Mar. 5, 1878	31	11	13	419
202, 469	Richardson, John, jr., Pomona, Cal. Thumb-rest for sheep-shears	Apr. 16, 1878	654	191	13	699
209, 586	Richardson, John C., New York, N. Y. Hatchway-door	Nov. 5, 1878	49	14	14	687
206, 134	Richardson, John H., and William J. Taylor, Marinette, Wis. Cork-extractor	July 16, 1878	747	215	14	111
203, 682	Richardson, John P., Cambridgeport, Mass. Reed-organ	July 2, 1878	235	70	14	38
202, 286	Richardson, John T., Harrisburg, assignor to Pennsylvania Steel Company, Steel Works, Pa. Brace and plate for point-switches	Apr. 9, 1878	453	132	13	667
297, 069	Richardson, Julius C., Manlius, N. Y., and Thomas R. Morgan, Alliance, Ohio. Die for making thrashing-machine teeth	Aug. 13, 1878	426	132	14	262
207, 208	Richardson, Julius C., Manlius, N. Y. Machine for upsetting collars on vehicle-axes	Aug. 20, 1878	585	175	14	286

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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	Richardson, Leonard. (See Chinnock, George H., assignor.)					
	Richardson, Marcus F. (See Neal, Thomas H., assignor.)					
205, 210	Richardson, Merrick A. and Gordon M., Chicago, Ill. Sieve	June 25, 1878	848	252	13	1127
199, 573	Richardson, Milo A., Bridgeport, Conn. Sharpening files	Jan. 22, 1878	886		13	163
	Richardson, Moses C. (See Johnson, Moses, assignor.)					
210, 302	Richardson, Orlo W., Chicago, Ill. Sample-exhibitor	Nov. 26, 1878	921	269	14	814
	Richardson, Orvis J. (See Brooks, Luman F., assignor.)					
	Richardson, R. J. (See Harper, James, assignor.)					
204, 915	Richardson, Samuel M., Boston, Mass. Vehicle-spring	June 18, 1878	539	157	13	1090
210, 148	Richardson, William G., Boston, assignor of one-half interest to John B. F. Ramedell, Quincy, Mass. Camp-bed	Nov. 19, 1878	674	200	14	779
199, 574	Richardson, William H., Salem, Mass. Counter-stiffener for boots and shoes	Jan. 22, 1878	886	260	13	163
200, 935	Riches, Charles, Caister, Great Yarmouth, Great Britain, assignor of one-half interest to H. R. J. Denton, Wolverhampton, England. Grinding-machine	Mar. 5, 1878	112	38	13	432
	Richey, Eli J. (See Smith & Richey.)					
209, 193	Richey, Gasper T., assignor of three-fourths interest to Oscar S. Hadley and Loyal E. Knappen, Hastings, and William J. Stuart, Grand Rapids, Mich. Flour-bolt	Oct. 22, 1878	830	{ 239 240 }	14	615
202, 470	Richey, James, Cincinnati, Ohio. Coffin and burial-casket	Apr. 16, 1878	654	191	13	700
	Richman, Alfred B. (See Murphy, Joseph, assignor.)					
209, 135	Richmond, Archibald M., New York, N. Y., assignor to George L. Richmond, East Orange, N. J. Combined button and fastener	Oct. 22, 1878	771	224	14	608
203, 373	Richmond, Charles C., Boston, Mass. Lamp-wick	May 7, 1878	145	42	13	840
	Richmond, Ephraim Thomas Carroll. (See Dunne & Richmond.)					
202, 870	Richmond, George B., Lansing, Mich. Speaking-telephone transmitter	Apr. 23, 1878	1107	{ 317 318 }	13	763
	Richmond, George L. (See Richmond, Archibald M., assignor.)					
209, 080	Richmond, Gilbert M., Chicago, Ill. Feathers for dusters	Oct. 15, 1878	693	201	14	592
203, 372	Richmond, Herbert and Walter S., New York, N. Y. Canceling and writing ink	May 7, 1878	144		13	840
	Richmond, Walter S. (See Richmond, Herbert and Walter S.)					
200, 845	Richter, Herman, Chicago, Ill. Bed-lounge	Mar. 5, 1878	32	11	13	420
	Richter, Rudolph. (See Wendes, Vogt & Richter.)					
206, 615	Rickard, Pull, and Anthony C. La Brash, Minneapolis, Minn. Calking-vise	July 30, 1878	1315	378	14	190
	Ricker, Gustavus. (See Kirk, Joseph S., assignor.)					
200, 220	Ricker, John W., Chelsea, Mass. Washing-machine	Feb. 12, 1878	333	100	13	293
207, 624	Ricketts, John B., Saint Joseph, Mo. Eye-shade	Sept. 3, 1878	40	13	14	354
199, 746	Ricklefsen, Oscar, New York, N. Y. Egg and fruit carrier	Jan. 29, 1878	1084	318	13	201
209, 776	Rickly, George C., Ottawa, Ill. Pen and pencil clasp	Nov. 12, 1878	269	80	14	721
207, 806	Riddick, Willis D., Belvidere, N. C. Baling-press	Sept. 10, 1878	338	102	14	395
	Riddle, Henry. (See Jones, Charles, assignor.)					
203, 943	Riddle, Richard Whittier, Minneapolis, Minn. Earth-closet	May 21, 1878	763	220	13	937
201, 449	Rider, Alexander K., Walden, N. Y. Drill-grinder	Mar. 19, 1878	659	201	13	525
205, 906	Same. Roller attachment for sliding doors	July 9, 1878	492	140	14	75
206, 356	Rider, Alexander K., Walden, N. Y. Air-engine	July 23, 1878	1023	{ 292 293 }	14	150
207, 683	Rider, George L., Kent, Iowa. Check-row attachment for corn-planters	Sept. 3, 1878	90	30	14	361
202, 194	Ridge, Elmer, Frankford, Philadelphia, Pa. Envelope	Apr. 9, 1878	360	105	13	654
	Ridgeway, D. H., et al. (See Evans, Louis, assignor.)					
199, 225	Ridgley, Hibbard Reginald, Ashland, Ohio. Harness-pad	Jan. 15, 1878	526	155	13	98
209, 294	Ridgway, George C., assignor of one-half interest to William Rhode, Olney, Ill. Permutation-lock	Oct. 22, 1878	924	269	14	629
	Rieder, Martin. (See Doll, Rieder & Diehlmann.)					
199, 226	Rieve, Carl, Baerwalde, Pomerania, Prussia. Material for insoles and apparatus for manufacturing the same	Jan. 15, 1878	527	155	13	96
	Rieter, Henry, Jr. (See Gröbli, Rieter & Wehrli.)					
203, 195	Rieter, Henry, Winterthur, John Wehrli, and Isaac Gröbli, Wülflingen, Switzerland, assignors to F. A. and A. E. Karsch, New York, N. Y. Embroidering-machine	Apr. 30, 1878	1445	{ 422 423 }	13	811
209, 422	Riethmüller, John C., Reserve Township, Allegheny, Pa., assignor to Simeon N. Drake, New Orleans, La. Punch and die for making bale-ties	Oct. 29, 1878	1065	309	14	632
200, 764	Riethmüller, John Christ, Pittsburg, Pa. Bale-tie	Feb. 26, 1878	914	269	13	396
209, 515	Rife, William A., Valley Mills, Va. Straw-cutter	Oct. 29, 1878	1106	339	14	667
	Riffe, Serena Temple. (See Riffe, William Coffee, assignor.)					
208, 851	Riffe, William Coffee, assignor to Serena Temple Riffe, Morton, Mo. Bee-hive	Oct. 8, 1878	430	125	14	554
204, 000	Rigby, Artemas, Upper Stillwater, Me. Hay-rake	May 21, 1878	924	264	13	956
	Rigby, Clark Free. (See Rigby, Seth, 3d, and Clark Free.)					
206, 970	Rigby, Clark Free and Seth, Summit City, Pa. Pump	Aug. 13, 1878	331	101	14	251
202, 121	Rigby, James A., Carson City, Nev. Governor	Apr. 9, 1878	281	82, 83	13	643
203, 374	Rigby, Nicholas L., assignor to self and John D. Pryor, Winfield, Kans. Lamp	May 7, 1878	146	42	13	840
	Rigby, Seth. (See Rigby, Clark Free and Seth.)					
200, 091	Rigby, Seth, 3d, and Clark Free Rigby, Newcastle, Pa. Liquid-measure	Feb. 5, 1878	202	63	13	264
200, 478	Riggan, Jonathan Hall, Forestville, N. C. Plow	Feb. 19, 1878	607	179	13	342
	Riggs, Benjamin E. (See Swan & Riggs.)					
200, 936	Rigney, James Joseph, and William Homingray, Shamokin, Pa. Coal-drill	Mar. 5, 1878	114	38	13	433
203, 855	Riker, Carroll L., New York, N. Y. Letter-sheet and envelope	May 21, 1878	673	190	13	924
199, 580	Riker, William, Newark, N. J. Ornamenting metallic surfaces for jewelry, &c	Jan. 22, 1878	892	262	13	164
202, 588	Same. Finger-ring	Apr. 16, 1878	789	228	13	715
200, 479	Riley, Peter, Fort Scott, Kans. Fruit-drier	Feb. 19, 1878	608	179	13	342
210, 966	Riley, William, Atkinson, Ill. Apparatus for watering stock	Dec. 17, 1878	658	161	14	925
200, 803	Riley, William P., assignor of one-half interest to Thomas Maitland, Williamsport, Pa. Tug-link	Feb. 26, 1878	951	280	13	402
201, 836	Rindge, Alfred, Mendon, Mich. Burglar-alarm	Mar. 26, 1878	1063	324	12	587
204, 452	Rinehart, George W., New Philadelphia, Ohio. Fruit-drier	June 4, 1878	36	12	13	1017
205, 419	Ring, John, Saint Louis, Mo. Cooling and freezing apparatus	June 25, 1878	1060	316	13	1165
206, 135	Same. same	July 16, 1878	748	215	14	112
206, 616	Ring, Virginia M., New Orleans, La. Automatic water cut-off	July 30, 1878	1316	378	14	190
	Riot, Louis Marie Theophile. (See Seilliere & Riot.)					
205, 097	Ripka, John C., and Nicholas Van Rees, Philadelphia, Pa. Easel	July 9, 1878	494	141	14	75
206, 617	Ripley, Daniel C., Pittsburg, Pa. Manufacture of glassware	July 30, 1878	1316	379	14	190
200, 221	Ripley, Eugene B., Unionville, Conn. Animal-trap	Feb. 12, 1878	334	101	13	293
	Ripley, Royal C. (See Stowe, Charles W., assignor.)					
201, 702	Rippin, Joseph, and William Treyer, Rochester, N. Y. Safe-bolt work	Mar. 26, 1878	926	{ 283 284 }	13	567
202, 738	Risdon, James A., Sycamore, assignor of one-half interest to Marcellus Winters, Freeport, Ill. Horse-shoe	Apr. 23, 1878	986	{ 287 284 }	13	748
	Risley, Elisha. (See Elsey, George, assignor.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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206, 405	Risser, Abraham F., and Michael G. Lang, Joliet, assignors to said Risser and Baltzer K. Reitz, Chicago, Ill. Harness-saddle	July 30, 1878	1096	313	14	163
201, 200	Rissmüller, Ludwig. (See Wiesinger & Rissmüller.)					
207, 897	Ritchel, Charles F., Corry, Pa., assignor to G. H. Hess, Winchester, Va. Flying-machine.	Mar. 12, 1878	380	118	13	479
199, 313	Ritchel, Charles Francis, Corry, Pa., assignor to C. B. Curtiss and J. B. Cuzner, Bridgeport, Conn. Nut-cracker	Sept. 10, 1878	339	102	14	395
207, 625	Ritchey, John B., Allegheny, Pa. Furniture-caster	Jan. 15, 1878	616	179	13	111
208, 636	Ritchie, Edward S., Brookline, Mass. Lantern	Sept. 3, 1878	41	13	14	354
210, 363	Rittenhouse, Alvah, Philadelphia, Pa. Harness	Oct. 1, 1878	184	53	14	513
209, 081	Rittenhouse, Henry N., assignor to self and Alfred Mellor, Philadelphia, Pa. Chew-ing-tobacco	Nov. 26, 1878	923		14	815
202, 871	Ritter, Hubert, Middletown, Conn. Combined stove-cover and check-damper	Oct. 15, 1878	694	201	14	592
204, 997	Ritterband, David S. (See Tragheim, Simon, assignor.)					
202, 871	Ritty, John, Dayton, Ohio. Car-coupling	June 18, 1878	621	182	13	1101
205, 420	Ritty, Sebastian, assignor of one-half interest to John Dodds, Dayton, Ohio. Horse hay-rake	Apr. 23, 1878	1108	318	13	763
200, 480	Rivard, Maxim J., assignor of one-half interest to F. Louis Dohmstreich, Detroit, Mich. Fastening for packing-box	June 25, 1878	1070	316	13	1165
8, 154	Rivera, Geronimo, Bridgetown, Island of Barbadoes, West Indies. Toilet-cabinet	Feb. 19, 1878	609	179	13	342
208, 852	Rivers, Thomas L., Saint Louis, Mo., assignor, by mesne assignments, to William B. Gould, New York, N. Y. Caster	Apr. 2, 1878	237	69	13	633
199, 467	Roadell, Robert Theodore, Farley, Iowa. Scaffold	Oct. 8, 1878	431	125	14	554
206, 358	Robb, William. (See Goodell & Robb.)					
205, 506	Robberson, E. T., et al. (See Smalstig, William C., assignor.)					
207, 445	Robbins & Appleton. (See Peux, John J., assignor.)					
205, 576	Robbins, Clementine B., South Abington, Mass. Underwaist	July 23, 1878	1025	293	14	150
202, 872	Robbins, Elisha, Cotuit, Mass. Ship's rudder	July 2, 1878	44	14	14	14
206, 137	Robbins, H. W., et al. (See McAvoy, Hugh L., assignor.)	Aug. 27, 1878	845	250	14	324
204, 377	Robbins, Joseph A., assignor of one-half interest to William E. Carlton and Eliphaz W. Arnold, Boston, Mass. Pepper or table-salt bottle	July 2, 1878	121	36	14	24
202, 873	Robbins, Martin, Lowell, Mass. Scraper for vehicle-wheels	Apr. 23, 1878	1110	318	13	763
200, 874	Robbins & Myers. (See Steele, Alden P., assignor.)					
206, 137	Robbins, Silas, Monroeville, Ohio. Bag-holder	July 16, 1878	750	215	14	112
204, 377	Robbins, Sumner, West Medway, Mass. Table	May 28, 1878	1245	354	13	1001
202, 873	Robellaz, John L. (See Jennings & Robellaz.)					
200, 874	Röber, Bernhard. (See Schultz, August Louis, assignor.)					
204, 251	Roberson, George W. and Henry F., Thushan, N. Y. Combined harrow and seeding-machine	Apr. 23, 1878	1110	319	13	764
202, 122	Roberson, Henry F. (See Roberson, George W. and Henry F.)					
200, 874	Robert, Fabian, Monroe, Mich., assignor to self and P. B. Brady, Toledo, Ohio. Wind-mill	Mar. 5, 1878	61	21	13	424
204, 251	Roberts, A. L. (See Hubbard, Erwin C., assignor.)					
202, 122	Roberts, Charles, et al. (See Atwater, Richard M., assignor.)					
200, 570	Roberts, Charles A., assignor of one-half interest to Charlotte M. Porter, Detroit, Mich. Car-coupling	May 28, 1878	1117	319	13	985
209, 836	Roberts, De Witt C., Chicago, Ill. Ore-separator	Apr. 9, 1878	283	83	13	643
201, 290	Roberts, Edward A. L. (See Glenn, James D., assignor.)					
200, 570	Roberts, Edward A. L., Titusville, Pa. Torpedo for oil-wells	Feb. 19, 1878	697	205	13	356
201, 290	Roberts, Edward J., Ashland, Ky., assignor of part interest to D. A. Fisher, G. T. Long, E. Manning, J. Moynihan, L. E. Veyssie, G. Millard, J. Lauterbach, W. B. and L. T. Moore, B. W. Singer, S. S. Savage, E. P. Tracy, G. Burggraf, C. F. Bartell, P. Morairty, jr., J. Arzheimer, and A. Miller. Rail-joint	Nov. 12, 1878	332	99	14	729
208, 202	Roberts, Frederick. (See Brown, William, assignor.)	Mar. 12, 1878	480	147	13	493
204, 846	Roberts, George S. (See Wadleigh & Roberts.)					
208, 035	Roberts, George S., Meredith, N. H. Molding-machine and wood-molding	Sept. 17, 1878	067	197	14	443
205, 809	Roberts, George W. (See Larwill, Alfred L., assignor.)					
210, 632	Roberts, Gracie Sayre, Brooklyn, N. Y. Case-hardening iron	June 11, 1878	445		13	1074
207, 070	Roberts, Hamilton K. (See Grimm, Fancher & Roberts.)					
209, 082	Roberts & Havell. (See Havell, George, assignor.)					
206, 749	Roberts, Isaac C. (See Weston, Edward, assignor.) (Reissue.)					
210, 631	Roberts, James, et al. (See Foster & Roberts.)					
207, 209	Roberts, James J., assignor to Frank J. Plumb, Geddes, N. Y. Liquid-measure	Dec. 10, 1878	275	75	14	868
210, 879	Roberts, Jesse, Leon, Iowa. Boot-jack	Aug. 20, 1878	586	176	14	287
208, 123	Roberts, John. (See Chapman, Joseph L., assignor.)					
208, 035	Roberts, John F., New York, N. Y. Cooking apparatus	Dec. 17, 1878	549	154	14	912
205, 809	Roberts, Legrand J., Meadville, assignor of one-half interest to Ransom C. Wright, Philadelphia, Pa. Flexible key for locks	Sept. 17, 1878	587	174	14	432
210, 632	Roberts, Mary Nye, Indianapolis, Ind. Sad-iron holder	Sept. 17, 1878	499	148	14	421
207, 070	Roberts, Oliver L., et al. (See Collier, Frederick M., assignor.)					
209, 082	Roberts, Oren N. (See Wadleigh & Roberts.)					
210, 632	Roberts, Robert, Saint Joseph, Mo. Cigar-machine	July 9, 1878	391	112	14	62
207, 070	Roberts, Robert, and John L. Knight, New York, N. Y. Outrigger and rowlock for boats	Dec. 10, 1878	276	75	14	869
209, 082	Roberts, Samuel, administrator. (See Walker, John D.)					
206, 749	Roberts, Samuel H., et al. (See Collier, Frederick M., assignor.)					
201, 048	Roberts, Thomas William. (See Clark & Roberts.)					
210, 560	Roberts, William. (See Halpine, Peter C., assignor.)					
203, 944	Roberts, William, Cincinnati, Ohio. Miner's lamp	Oct. 15, 1878	695	201	14	592
210, 633	Roberts, William, jr., assignor to self and John Daniell, Calumet, Mich. Signaling apparatus	Aug. 6, 1878	92	30	14	218
201, 048	Roberts, William A., and Massena E. Gary, Richmond, Va. Pneumatic fountain-stamp.	Mar. 5, 1878	229	72	13	450
210, 560	Robertshaw, Frederick W., Pittsburg, Pa. Hose-band	Dec. 3, 1878	186	49	14	847
203, 944	Robertson, Ervin A. (See Robertson, Samuel N. and Ervin A.)					
210, 633	Robertson, George W. (See Taylor, William, assignor.)					
203, 944	Robertson, George W., assignor to Southard, Robertson & Co., Peekskill, N. Y. Stove-shelf	May 21, 1878	764	220	13	937
210, 633	Robertson, James W., Friend, Nebr. Fly-wheel	Dec. 10, 1878	277	75	14	869

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206, 829	Robertson, John, Montreal, Canada, assignor to Frederick Adee and James Foley, Brooklyn, N. Y. Manufacture of plumbers' trap.....	Aug. 6, 1878	174	55	14	228
206, 264	Robertson, John A., Boston, Mass. Fishing-rod.....	July 23, 1878	910	259	14	136
207, 550	Robertson, Jonathan B., Martin, Tenn. Fence.....	Aug. 27, 1878	959	281	14	339
207, 985	Robertson, L. O., trustee. (See Whitney, George E., assignor.)					
202, 962	Robertson, R. Blair, Glasgow, Scotland. Grain-separator.....	Sept. 10, 1878	431	130	14	407
201, 049	Robertson, Samuel N. and Ervin A., Hampden, Me. Apparatus for catching fish.....	Apr. 30, 1878	1211	350	13	780
	Robertson, Thomas, Toronto, Ontario, Canada. Portable tray receiver and elevator for lozenge-machines.....	Mar. 5, 1878	230	72, 73	13	450
	Robeson, Daniel S. (See Paine, Henry M., assignor.)					
203, 375	Robie, John E., et al. (See Fletcher, Thomas, assignor.)					
198, 816	Robinson, Albert S., assignor of one-half interest to Nelson Lyon, Albany, N. Y. Snow-shovel.....	May 7, 1878	147	42	13	840
201, 949	Robinson, Alfred, New York, N. Y. Carpet-lining.....	Jan. 1, 1878	96	27	13	21
199, 575	Robinson, Andrew J., assignor to self and Thomas Prince, Boston, Mass. Emery-wheel clamp.....	Apr. 2, 1878	85	24	13	611
209, 136	Robinson, Charles, Cambridgeport, Mass. Reflector for lamps, &c.....	Jan. 22, 1878	887	260	13	163
	Robinson, Charles H., Cleveland, Ohio. Butter-package.....	Oct. 22, 1878	771	224	14	608
	Robinson, Clark. (See Ellis & Robinson.)					
201, 837	Robinson, Clark, et al. (See Crandall, Lucius P., assignor.)					
205, 421	Robinson, Clark, assignor to Smith & French, Eau Claire, Wis. Plow-clevis.....	Mar. 26, 1878	1064	324	13	587
199, 684	Robinson, Edgar, Dennison, Ohio. Steam-packing.....	June 25, 1878	1071	317	13	1165
204, 684	Robinson, Edward, Brooklyn, N. Y. Roller-skate.....	Jan. 29, 1878	1009	294	13	189
208, 495	Robinson, Edward, Wilmington, Del., assignor to Woodruff Sleeping Car and Parlor Coach Company, Pittsburg, Pa. Sleeping-car.....	June 11, 1878	268	83	13	1054
200, 875	Robinson, Henry S., Boston, Mass. Soldering apparatus.....	Oct. 1, 1878	40	12	14	494
199, 167	Robinson, Frank H., assignor of one-half interest to Ira B. Tripp, Aurora, Ill. Bracket.....	Mar. 5, 1878	62	21	13	424
204, 845	Robinson, Frank J., Lake Village, N. H. Mop-wringer.....	Jan. 15, 1878	472	139	13	89
205, 140	Robinson, George H., et al. (See Reynolds, George H., assignor.)	June 11, 1878	445	130	13	1074
8, 058	Robinson, Henry S., Boston, Mass. Apparatus for cleansing and bleaching textile fabrics.....	June 18, 1878	702	225	13	1120
	Robinson, Isaiah J., assignor to Henry Fairbanks, Saint Johnsbury, Vt. Try-square and bevel.....	Jan. 29, 1878	1221	358	13	222
202, 195	Robinson, John E. (See Oliver & Robinson.)					
	Robinson, John H., Manchester Bridge, N. Y. Bit for horses.....	Apr. 9, 1878	361	106	13	654
201, 125	Robinson, John T. (See Spring & Robinson.)					
	Robinson, Orville M., Upper Jay, N. Y. Holdback for vehicle.....	Mar. 12, 1878	311	95	13	469
	Robinson, Samuel H. (See Kaiser & Stangaard, assignors.)					
	Robinson, Susanna L., et al. (See Powell, Newman J., assignor.)					
8, 174	Robinson, William M. (See Drew, Walter J., assignor.)					
208, 036	Robjohn, Thomas, assignor, by mesne assignments, to George H. Wooster, New York, N. Y. Fluting-machine.....	Apr. 16, 1878	827	{ 239 } { 240 }	13	719
208, 136	Robley, Joseph, Brooklyn, N. Y. Manufacture of floor-cloth.....	Sept. 17, 1878	500		14	421
208, 928	Roche, Robert F., United States Army. Adding-stick.....	July 16, 1878	749	215	14	112
	Rochow, Ferdinand. (See Dinkel & Rochow.)					
	Rock, Frederick, Skaneateles, assignor of one-half interest to Nelson Moreland, Sennet, N. Y. End-gate fastening.....	Oct. 15, 1878	522	152	14	570
200, 344	Rockefeller, William F. (See Victory, Charles H., assignor.)					
8, 515	Rockey, Henry M., Rock Grove, Ill. Rain-water shut-off.....	Feb. 12, 1878	464	137	13	312
201, 703	Rockfellow, Albert G., Ashland, Oreg. Gate.....	Dec. 10, 1878	478	135	14	895
	Rockford Watch Company. (See Stoner, Benjamin F., assignor.)	Mar. 26, 1878	927	284	13	567
205, 422	Rockwell, Charles H., Chatham, Mass. Lamp or lantern.....	June 25, 1878	1072	317	13	1165
198, 754	Rockwell, Dewitt, and Nathan Doty, Columbus, Ohio. Clamp.....	Jan. 1, 1878	26	6	13	12
200, 667	Rockwell, William H. (See Wadsworth, Herbert, assignor.)					
203, 196	Roda, Adolph, Rochester, N. Y. Rear sight for fire-arms.....	Feb. 26, 1878	817	240	13	382
	Rodebaugh, George W., Jackson, Mich. Gate.....	Apr. 30, 1878	1450	424	13	811
211, 052	Rodecker, James S. (See Leonard, William R., assignor.)					
	Rodenhausen, Leonhard, Philadelphia, Pa. Dumping-wagon.....	Dec. 17, 1878	767	210	14	938
	Rodenheber, Philip, et al. (See Enig, Adam and Theodor, assignors.)					
	Rodgers, A. (See Gleason, Robert E., assignor.)					
208, 853	Rodgers, Alexander. (See Lemieux, John B., assignor.)					
207, 551	Rodgers, John F., Philadelphia, Pa. Preservative wrapping and packing paper.....	Oct. 8, 1878	431		14	554
210, 634	Rodgers, Samuel, Los Angeles, Cal. Tubular needle for embalming.....	Aug. 27, 1878	959	281	14	339
199, 576	Rodgers, William Wallace, Hartland, Vt. Fruit-packer.....	Dec. 10, 1878	278	76	14	899
207, 071	Rodig, Charles Herrmann, Cleveland, Ohio. Support for hose-nozzles.....	Jan. 22, 1878	888	260	13	163
200, 937	Roeder, Alexander, Weimer, Tex. Bale-tie.....	Aug. 13, 1878	428	133	14	263
204, 453	Roeder, George, New York, N. Y. Rocking-chair.....	Mar. 5, 1878	115	39	13	433
	Roehl, Carl, assignor of three-fourths interest to R. A. Culter, David C. Proctor, and Adelbert E. Bronson, Peoria, Ill. Hearth for cooking-stoves.....	June 4, 1878	36	12	13	1018
	Roemer, Brothers. (See Roemer, William, assignor.)					
208, 541	Roemer, William. (See Schmickl, Malhaus, assignor.)					
203, 197	Roemer, William, assignor to Roemer Brothers, Newark, N. J. Lock for satchels.....	Oct. 1, 1878	85	25	14	500
203, 376	Roper, John J., Philadelphia, Pa. Sectional steam-generator.....	Apr. 30, 1878	1451	424	13	811
	Rogers, Abbott S., and William W. Fuller, Salem, Mass. Shoemaker's jack.....	May 7, 1878	148	42	13	840
8, 401	Rogers, Alfred F. (See Rogers, Charles E. and Alfred F.)					
	Rogers, Arthur H., assignor to R. H. Smith & Co., Springfield, Mass. Elastic-faced printing-type.....	Sept. 3, 1878	222	69	14	376
201, 632	Rogers, Arthur H., Springfield, Mass. Elastic-faced printing-type.....	Mar. 26, 1878	805	263	13	557
205, 684	Rogers, Benjamin Franklin, Lathrop, Mo. Weighing-scale.....	July 2, 1878	237	70	14	39
209, 295	Rogers, Charles, Pittsburg, Pa., assignor to self and Thomas B. Kerr. Water-closet.....	Oct. 22, 1878	925	270	14	629
203, 946	Rogers, Charles D., assignor to American Screw Company, Providence, R. I. Metal-screw machine.....	May 21, 1878	765	221	13	937
211, 053	Same..... Screw-machine.....	Dec. 17, 1878	768	211	14	938
199, 314	Rogers, Charles E. and Alfred F., Boston, Mass. Upright-piano action.....	Jan. 15, 1878	617	{ 179 } { 180 }	13	112
211, 055	Rogers, Davenport, Galion, Ohio. Apparatus for separating refined petroleum into oils of different grades and fire-tests.....	Dec. 17, 1878	769	211	14	938
209, 923	Rogers, Edbert H., Boley Springs, assignor of one-half interest to Wiley Davis, Fayette County, Ala. Cotton-hoe.....	Nov. 12, 1878	419	126	14	711
202, 471	Rogers, Enos Truman, New York, N. Y. Water-filter.....	Apr. 16, 1878	655	192	13	706
199, 935	Rogers, Ethan, assignor to James C. Gaines, Cleveland, Ohio. Lathe-chuck for turning stone.....	Feb. 5, 1878	48	15	13	249

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. K.	Vol.	Page.
205, 357	Rogers, Frederick O., Boston, Mass. Device for melting snow and ice in the gutters of buildings	July 23, 1878	1024	293	14	150
8, 164	Rogers, George, Mount Vernon, Ohio. Traction-engine	Apr. 9, 1878	499	146	13	673
8, 526	Rogers, George, Mount Vernon, Ohio, assignor of three-fourths interest to Charles G. Cooper, Frank L. Fairchild, and Charles Cooper. Traction-engine	Dec. 17, 1878	800	219	14	942
205, 810	Rogers, George W., Frankford, Mo. Check-row attachment for seed-planters	July 9, 1878	392	112	14	62
211, 054	Rogers, Irene L., Springfield, Mass. Skeletonizing leaves	Dec. 17, 1878	769		14	938
210, 213	Rogers, James Harris, Washington, D. C. Carbon-regulator for electric lights	Nov. 26, 1878	757	225	14	793
206, 618	Rogers, James L., and Joseph A. Tuttle, assignors to said Rogers, George W. D. Cook, and Fred S. Steward, Atlanta, Ga. Fruit-drier	July 30, 1878	1317	379	14	191
	Rogers, Lebbeus H. (See Foster, Charles, assignor)					
202, 589	Rogers, Lebbeus H., New York, N. Y. Letter-sheet	Apr. 16, 1878	790	228	13	715
202, 874	Same. Combined letter-sheet and envelope	Apr. 23, 1878	1112	319	13	764
	Rogers, Lewis H. (See Eaton, Morris B., assignor)					
205, 301	Rogers, Marcus Harmon, Great Barrington, Mass. Newspaper-folding machine	June 25, 1878	944	280	13	1149
190, 227	Rogers, Samuel, Pittsburg, Pa. Gate	Jan. 15, 1878	528	155	13	98
210, 805	Rogers, Samuel, Kenton, Ohio. Iron gate	Dec. 10, 1878	455	128	14	892
207, 552	Rogers, Seymour, Allegheny, Pa. Chill-mold	Aug. 27, 1878	960	281	14	339
204, 945	Rogers, Thomas B., Jr., Brooklyn, assignor to self and Peter Cooper, New York, N. Y. Shutter bower and fastener	May 21, 1878	785	220	13	937
204, 091	Rogers, Thomas Van S. (See Sherman, Benjamin M., assignor)					
205, 683	Rogers, Wallace C., Papillion, Neb. Sulky-plow	May 21, 1878	924	264	13	956
	Rogers, William H., Williamson, N. Y. Fruit-drying house	July 2, 1878	236	70	14	38
	Rogers, William W. (See Platz & Rogers)					
190, 577	Rohde, Johann Carl Adolph, Hamburg, Germany. Air-filter for beer-pumps	Jan. 22, 1878	889	261	13	163
205, 577	Rohrbach, William Yoder, Kribb's Farm, Pa. Cover for casing-heads of oil-wells	July 2, 1878	121	36	14	24
200, 804	Rokker, Henry W., Springfield, Ill. Book-binder's beveling-machine	Feb. 26, 1878	952	280	13	402
207, 898	Rolland, Augustus, and John Baradel, assignors of one-fourth interest to Daniel R. Clymer, Reading, Pa. Umbrella-runner	Sept. 10, 1878	340	103	14	395
	Rollings, Winfield S., et al. (See Smith, William, assignor)					
209, 986	Rollins, Edwin J. E., Alton, N. H. Lasting-jack for boots and shoes	Nov. 19, 1878	499	152	14	755
205, 685	Romaine, John D., Springdale, Iowa. Fence-post	July 2, 1878	238	71	14	39
205, 211	Romans, Ephraim and Freeland H., Indianola, Iowa. Farm-gate	June 25, 1878	840	252	13	1137
	Romans, Freeland H. (See Romans, Ephraim and Freeland H.)					
	Romer & Co. (See Ahrend, Hermann, assignor)					
206, 042	Romig, William B., Leighton, assignor to self and Charles H. Weiss, Eckley, Pa. Iron platform for wagons	July 16, 1878	644	187	14	99
201, 557	Romine, Cyrus, Williamsport, Ind. Flour and meal chest with sifting attachment	Mar. 19, 1878	769	234	13	540
203, 924	Ronaix, Henri, Paris, France. Palette for testing oils	Nov. 12, 1878	419	126	14	741
211, 056	Roney, Alexander B., assignor of one-half interest to Benjamin F. Kennedy, Pittsburg, Pa. Registering ballot-box	Dec. 17, 1878	770	211	14	938
204, 168	Roney, Robert John, Syracuse, N. Y. Fish, bait, and oyster can	May 28, 1878	1028	293	13	973
198, 063	Ronney, Olpha, Jr., San Francisco, Cal. Gage for sawing-machines	Jan. 8, 1878	253	72	13	55
200, 481	Rontey, Abel Matthias, New York, N. Y. Chamber-vessel	Feb. 10, 1878	610	180	13	343
201, 126	Rood, Edwin O., Lodi, Ill. Washing-machine	Mar. 12, 1878	311	95	13	460
203, 559	Rood, Le Roy W., Aurora, Ill. Cane	May 14, 1878	362	102	13	876
	Rooney, Mary A. T., et al. (See Moore, William D., assignor)					
202, 963	Roop, Joseph W., assignor to William J. Tapp, Louisville, Ky. Bale-tie	Apr. 30, 1878	1213	351	13	781
8, 420	Roos, August, New York, N. Y. Beer-cooler	Sept. 17, 1878	695	204	14	446
	Roosevelt, Cornelius. (See Simon, Thomas, assignor)					
200, 222	Root, Corydon A., Andover, Ohio, assignor of one-half interest to Isaac M. Rice, Windsor, N. Y. Fence	Feb. 12, 1878	335	101	13	293
201, 950	Root, Datus Nelson, assignor to O. F. Hodges, Dubuque, Iowa. Well-auger	Apr. 2, 1878	86	25	13	611
205, 212	Root, John B., New York, N. Y. Road-locomotive	June 25, 1878	850	252	13	1137
205, 213	Same. Mechanical movement	June 25, 1878	852	253	13	1137
210, 435	Same. Velocipede	Dec. 3, 1878	46	11	14	830
	Root, Joseph. (See Johnson, Louis J., assignor)					
	Root, Lawrence O. (See Baker & Root.)					
210, 806	Root, S. Emerson, Bristol, Conn. Clock-dial	Dec. 10, 1878	456	128	14	892
201, 050	Root, Sylvester, Kentland, Ind. Fire-escape	Mar. 5, 1878	231	73	13	450
208, 124	Same. Sash-fastener	Sept. 17, 1878	587	174	14	432
210, 053	Roper, William D., and Joshua W. Mitchell, assignors to selves and William S. Johnson, Deep Creek, Va. Sash-fastener	Nov. 19, 1878	572	172	14	765
208, 927	Ropp, Jerome W., Elvria, Ohio. Toe-weight for horses	Oct. 15, 1878	521	151	14	570
202, 376	Rose, Albert P., assignor to self and Thomas Babington, Beowawe, Nev. Hame	Apr. 16, 1878	565	165	13	686
	Rose, George C. (See Rose, Peleg and George C.)					
	Rose, Israel M. (See Barnum, Isaac W., assignor)					
199, 578	Rose, Joseph F., assignor, by mesne assignments, to self and Benjamin A. Gray, Tiverton, R. I. Night-chimney for lamps, &c.	Jan. 22, 1878	890	261	13	163
205, 578	Rose, Joshua, and Park Benjamin, New York, N. Y. Chromatic tempering-scale	July 2, 1878	122	36	14	24
200, 409	Rose, Lauchlan, London, England. Bottle-stopper	Feb. 19, 1878	538	159	13	332
199, 579	Rose, Morris, New York, N. Y. Machine for nailing and clamping picture-frames	Jan. 22, 1878	890	261	13	163
206, 971	Rose, Peleg and George C., Norwich, Conn. Machine for separating the fibers of wood for paper-pulp	Aug. 13, 1878	332	101	14	251
207, 553	Same. Machine for separating the fibers of wood for paper-stock	Aug. 27, 1878	961	282	14	339
199, 315	Rose, Reuben M., Brooklyn, N. Y. Darning attachment for sewing-machines	Jan. 15, 1878	620	180	13	112
207, 446	Rose, Truman H., assignor to self and James W. Anthoine, Miller's Falls, Mass. Screw-cutting die-stock	Aug. 27, 1878	846	250	14	324
200, 587	Rose, William Rilye, Glennville, Cal. Pruning implement	Nov. 5, 1878	50	15	14	688
202, 875	Roseman, Edward D., assignor of one-half interest to Cyrus B. Minshall, Mount Pleasant, Iowa. Fence-post	Apr. 23, 1878	1114	320	13	764
	Rosenberg, Abraham. (See Leonard, Harvey Reid, assignor)					
202, 472	Rosenfield, Albert, assignor to Louis E. Rosenfield, Detroit, Mich. Car-brake	Apr. 16, 1878	656	192	13	700
	Rosenfield, Louis E. (See Rosenfield, Albert, assignor)					
201, 358	Rosensterna, Anders, New York, N. Y. Shoemaker's lamp	Mar. 19, 1878	570	175	13	512
	Rosenstock, Moritz. (See Broseman, Russenberger & Rosenstock.)					
207, 072	Rosenz, Enrico, Cincinnati, Ohio. Stomach and enema pump	Aug. 13, 1878	429	133	14	263
208, 929	Roscarwie, William H., Cincinnati, Ohio, assignor, by mesne assignments, to self, Daniel Phillips, John Rees, and Margaret J. Phillips, Newport, Ky. Apparatus for compressing fuel	Oct. 15, 1878	523	152	14	570
	Same. Coke-oven	Oct. 15, 1878	525	153	14	570
204, 252	Rosier, Aaron, Sussex, Wis. Double-tree clevis	May 28, 1878	1118	319	13	985



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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
201, 558	Rosquist, George, Brooklyn, N. Y. Rotary printing-machine.	Mar. 19, 1878	770	234	13	540
199, 316	Ross, Abbott Q., Cincinnati, Ohio. Gas-retort charger.	Jan. 15, 1878	621	180	13	113
209, 777	Same. Toy galloping horse and carriage.	Nov. 12, 1878	280	80	14	721
210, 271	Same. Velocipede.	Nov. 26, 1878	618	242	14	801
207, 821	Ross, Alexander, and Samuel J. Parker, Rochester, N. Y. Grain-binder.	Sept. 10, 1878	250	79	14	384
	Ross, Austin P. (See Everest & Ross). (Reissue.)					
	Ross, Caroline E., administratrix. (See Everest & Ross). (Reissue.)					
	Ross, David G. (See McDougall, Alexander, assignor.) (Reissue.)					
209, 715	Ross, Davis & Co. (See Ross, Simon, assignor.) (Reissue.)					
	Ross, Eli, and John W. McLeod, assignors to United States Steam Feed Company, Boston, Mass. Apparatus for preparing cereals for food.	Nov. 5, 1878	193	57	14	707
201, 127	Ross, George W., Troy, N. Y. Mucilage-holder.	Mar. 12, 1878	313	96	13	409
206, 750	Ross, George W., Newton, Va. Harrow.	Aug. 6, 1878	93	30	14	218
206, 139	Ross, H. Schuyler, Chicago, Ill. Stuffing-box for steam-engines.	July 16, 1878	751	216	14	112
	Ross, James S. (See Ross, William B. and James S.)					
208, 336	Ross, John D., Macon, Ga. Car-coupling.	Sept. 24, 1878	828	242	14	460
209, 987	Ross, John F., assignor to William F. Ross, Toronto, Ontario, Canada. Sheet-metal package.	Nov. 19, 1878	500	152	14	755
	Ross, John G. (See Hawley, Melville C., assignor.)					
206, 900	Ross, John K., Newark, N. J. Corset.	Aug. 13, 1878	270	82	14	243
210, 149	Ross, Josiah, Buffalo, N. Y. Planing-machine.	Nov. 19, 1878	675	201	14	779
199, 996	Ross, Martinus, Abilene, Kans. Boot-jack.	Feb. 5, 1878	103	34	13	249
204, 998	Ross, Milton, San José, Cal. Vineyard-plow.	June 18, 1878	622	182	13	1101
	Ross, Monroe L., et al. (See Nye, Charles H., assignor.)					
201, 838	Ross, Oliver B., Monticello, Iowa. Gang cheese-press.	Mar. 26, 1878	1065	324	13	587
8, 421	Ross, Simon, assignor to Ross, Davis & Co., Cincinnati, Ohio. Machine for beating out and molding the soles of boots and shoes.	Sept. 17, 1878	696	204	14	446
8, 131	Ross, Thomas J., Union, N. Y., assignor to John F. Paret, Washington, D. C. Adjustable back for stools.	Mar. 19, 1878	312	247	13	546
200, 765	Ross, William B. and James S., assignors of one-half interest to Edward R. Campbell and Harry Harrison, Nashville, Tenn. Spring-scale.	Feb. 26, 1878	915	269	13	396
199, 865	Ross, William C., Cincinnati, Ohio. Piston-valve.	Jan. 29, 1878	1195	351	13	218
	Ross, William F. (See Ross, John F., assignor.)					
202, 377	Ross, William R., Dayton, Ohio. Letter-sheet and envelope.	Apr. 16, 1878	565	165	13	687
206, 972	Rosser, William F., and Julius L. Briggs, Marshfield, Mo. Printing-press.	Aug. 13, 1878	333	102	14	251
	Rossmann, Leonard J. (See Rossmann, William F., assignor.)					
205, 141	Rossmann, William F., assignor of one-half interest to Leonard J. Rossmann, Hudson, N. Y. Ventilator and chimney-top.	June 18, 1878	763	226	13	1120
207, 770	Roswall, Lars Jacob Alfred, Clarence, Mo. Bed-slat coupler.	Sept. 3, 1878	195	59	14	373
200, 408	Roswell, Elisha R., Stratford, Conn. Lamp-chimney.	Feb. 19, 1878	538	150	13	332
200, 668	Rote, John F., Reading, Pa. Vegetable-cutter.	Feb. 26, 1878	817	241	13	382
200, 571	Roth, Charles A., Washington, D. C. Game apparatus.	Feb. 19, 1878	698	205	13	356
209, 137	Rotschka, Eugene H., and Oscar F. Davis, said Rotschka assignor to said Davis; said Davis assignor of one-half interest to Absalom J. Kalb, Quincy, Ill. Fire-escape.	Oct. 22, 1878	772	224	14	608
209, 516	Roulstone, Edward A. G., Boston, Mass. Paper-fastener.	Oct. 29, 1878	1167	339	14	667
210, 967	Same. "Smoke-convey" for cooking-stoves.	Dec. 17, 1878	959	181	14	925
202, 964	Rounds, Harley M., Manawa, Wis. Machine for making staves.	Apr. 30, 1878	1214	351	13	781
202, 378	Rounds, Thomas W., and Thomas L. Reed, Providence, R. I. Whip.	Apr. 16, 1878	566	166	13	687
200, 360	Same. Horse-scraper.	Oct. 29, 1878	1003	292	14	643
201, 951	Roundy, William H., Marshalltown, Iowa. Fence-post.	Apr. 2, 1878	87	25	13	612
202, 052	Rouse, Albion M., Boulder, Colo. Apparatus for regulating reciprocating motion.	Apr. 2, 1878	191	56	13	626
207, 210	Rouse, George L., and Marshall W. Stoddard, Cincinnati, Ohio. Vehicle-hub.	Aug. 20, 1878	586	176	14	287
205, 142	Rouse, John H., Somerville, assignor of one-half interest to Austin J. Coolidge, Watertown, Mass. Time-indicator for letter-boxes.	June 18, 1878	765	226	13	1120
199, 107	Rousseau, David, New York, N. Y. Switch-signal.	Jan. 8, 1878	591	117	13	78
209, 423	Rousseau, David, Morrisania, N. Y. Switch-signaling apparatus.	Oct. 29, 1878	1063	310	14	653
205, 302	Rousseau, François X., Arthabaskaville, Quebec, Canada. Measuring-faucet.	June 25, 1878	945	281	13	1149
210, 054	Roussin, François Z., assignor to Alcide François Poirier, Paris, France. Coloring matter derived from aniline and its homologues.	Nov. 19, 1878	572	14		765
205, 579	Row, Edward, Indiana, Pa. Fire-escape.	July 2, 1878	123	37	14	25
204, 750	Rowe, Emilie G., New York, N. Y. Sad-iron polisher.	June 11, 1878	348	105	13	1064
210, 880	Rowe, John, jr., and John S. Knight, Rockport, Mass. Beer-faucet.	Dec. 17, 1878	550	154	14	912
	Rowe, Solomon S., et al. (See Beckett, John R., assignor.) (Reissue.)					
198, 903	Rowell, Benuing, West Sparta, N. Y. Car-coupling.	Jan. 1, 1878	187	53	13	37
202, 473	Rowell, Curtus G., Dallas, Ore. Shaft-coupling.	Apr. 16, 1878	657	192	13	700
200, 766	Rowell, Edward, 2d, Salem, Mass. Device for reefing jibs.	Feb. 26, 1878	915	269	13	397
	Rowell, Guilford D. (See Birge, Woodward & Rowell.)					
207, 684	Rowell, Harvey, Columbus, Wis. Gun sight.	Sept. 3, 1878	100	30	14	361
210, 712	Rowell, Jonathan R., Hill, N. H. Lens for spectacles.	Dec. 10, 1878	356	98	14	878
201, 633	Rowen, Nelson, Oswego, Kans. Rocking-churn with vibrating dasher.	Mar. 26, 1878	806	263	13	557
204, 612	Rowen, Nelson, and Garret Amis, Oswego, Kans. Wheel plow.	June 4, 1878	188	60	13	1049
205, 686	Rowen, Nelson, and Martin D. Miller, Oswego, Kans. Weather-strip.	July 2, 1878	239	71	14	39
	Rowland, H., et al. (See Gilbert, George, assignor.)					
	Rowland, James, et al. (See Chewning, John W., jr., assignor.)					
206, 973	Rowland, Lowrey H., Monmouth, Ore. Horse-power equalizer.	Aug. 13, 1878	333	102	14	251
	Rowland, Nathan, et al. (See Chewning, John W., jr., assignor.)					
199, 936	Rowland, Thomas F., New York, N. Y. Universal globe-valve.	Feb. 5, 1878	49	16	13	240
206, 486	Rowland, Thomas F., Green Point, N. Y. Machine for forming iron vessels.	July 30, 1878	1179	338 339 340	14	174
	Rowland, William, et al. (See Gilbert, George, assignor.)					
205, 908	Rowlett, Joseph F., Richmond, Ind. Adjustable stove pipe.	July 9, 1878	494	141	14	75
203, 377	Rowley, Edwin H., et al. (See Morrison, Enoch R., assignor.)					
204, 092	Royal, George, Truckee, Cal. Track-clearer.	May 7, 1878	149	43	13	841
210, 968	Same. same.	May 21, 1878	925	265	13	857
204, 613	Royal, Jarvis, Rochelle, Ill. Fire-arm.	Dec. 17, 1878	660	182	14	925
204, 614	Royce, John S., Cuylerville, N. Y. Harvester.	June 4, 1878	188	60	13	1039
209, 424	Same. same.	June 4, 1878	194	62	13	1040
208, 854	Royle, John James, Manchester, Great Britain. Expansion steam-trap.	Oct. 29, 1878	1068	310	14	633
	Royse, James D., Cane Valley, Ky. Combination garden-tool.	Oct. 8, 1878	432	125	14	554
	Rubber and Celluloid Harness Trimming Company. (See Lockwood, David C., assignor.)					
202, 053	Rubber Step Manufacturing Company. (See Sawyer, Francis A., 2d, assignor.)					
	Rubel, Henry Wirt, Butler, Mo. Bed-bottom.	Apr. 2, 1878	192	56	13	626

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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200, 223	Rubin, Eduard, and August Fornerod-Stadler, Thun, Switzerland. Combination shell-fuse	Feb. 12, 1878	336	101	13	283
205, 214	Ruckel, Samuel R., Kansas City, Mo. Fruit-picker	June 25, 1878	853	253	13	1137
8, 149	Rudd, Karl E., Cassopolis, Mich. Gate	Apr. 2, 1878	231	67	13	632
205, 909	Ruddick, Elwood and Jacob M., Jackson County, Ind. Gang-harrow	July 9, 1878	495	141	14	75
	Ruddick, Jacob M. (See Ruddick, Elwood and Jacob M.)					
203, 295	Rude, Peter H., assignor of one-half interest to Oliver Anderson, Clinton, Wis. Gate	May 7, 1878	63	20	13	829
207, 305	Rudolph, Alexander, New York, N. Y. Window-sash	Aug. 20, 1878	683	203	14	299
	Rudolph, Charles. (See Furst & Rudolph.)					
209, 517	Rue, Samuel, Philadelphia, Pa. Water-supply for injectors or steamboat-boilers	Oct. 29, 1878	1168	339	14	667
	Ruelle, Nalbert. (See Beausoleil, Alfred, assignor.)					
200, 572	Ruge, Detlef, Providence, R. I. Life-preserver	Feb. 19, 1878	699	205	13	356
	Ruger, Augustus. (See Ruger, James W. and Augustus.)					
211, 057	Ruger, James W. and Augustus, Buffalo, N. Y. Cracker-machine	Dec. 17, 1878	778	212	14	938
200, 151	Ruggles, Lorenzo, Frankfort, Ill. Road-scraper	Feb. 12, 1878	269	80	13	283
202, 474	Ruggles, Robert B., Windsor, Conn. Latch	Apr. 16, 1878	657	192	13	700
203, 072	Ruggles, Silas, Three Rivers, Mass. Bug-exterminator	Apr. 30, 1878	1316	382	13	794
204, 506	Ruggles, Stephen P., Boston, Mass., assignor to Elizabeth Thompson, New York, N. Y. Fire-place blower	June 4, 1878	80	27	13	1024
209, 425	Ruhe, Charles H. W., Pittsburg, Pa. Machine for flaring and crimping lamp-chimneys, &c.	Oct. 29, 1878	1069	310	14	653
200, 619	Ruhlmann, Eugene, Lockport, N. Y. Machine for manufacturing moth-traps for trees	July 30, 1878	1318	379	14	191
210, 881	Same. Seed-drill	Dec. 17, 1878	551	155	14	912
206, 901	Ruhmann, Julius Paul, Schulenburg, Tex. Insect-destroyer	Aug. 13, 1878	271	82	14	243
206, 140	Rumbaugh, Joseph, Fremont, Ohio. Refrigerator-building	July 16, 1878	753	216	14	112
209, 926	Rumpp, Edwin, and Arno Weinreich, Philadelphia, Pa. Handle attachment for traveling-bags and satchels	Nov. 12, 1878	422	127	14	741
	Rumsey, L. M., et al. (See Hewitt, Horace L., assignor.)					
	Same. (See Squire, John J., assignor.)					
	Rumsey, Lewis M., et al. (See Wilcox, Joseph S., assignor) (Reissue.)					
	Rumsey, M., et al. (See Hewitt, Horace L., assignor.)					
	Rumsey, Moses, et al. (See Squire, John J., assignor.)					
	Same. (See Wilcox, Joseph S., assignor) (Reissue.)					
207, 073	Rumsey, William D., Muncie, Ind. Door-securer	Aug. 13, 1878	430	133	14	263
204, 760	Rundlet, Henry, assignor of one-half interest to George L. Williams, Edwardsville, Ill. Process of developing photographic pictures	June 11, 1878	349	.....	13	1064
204, 761	Rundlet, Daniel S., Boston, Mass. Lock-hinge	June 11, 1878	350	106	13	1064
201, 201	Rundlett, James C., Portland, Me. Specie-purse	Mar. 12, 1878	381	118	13	480
204, 093	Runstetler, Andrew and Michael, assignors to Deere & Mansur Company, Moline, Ill. Corn-planter	May 21, 1878	926	265	13	957
210, 214	Same. Combined drill and corn-planter	Nov. 26, 1878	758	{ 225 226 }	14	793
	Runstetler, Michael. (See Runstetler, Andrew and Michael.)					
203, 649	Runton, George and John, Hoboken, N. J. Desk	May 14, 1878	445	126	13	889
204, 762	Same. Blind-fastening	June 11, 1878	350	106	13	1064
	Runton, John. (See Runton, George and John.)					
210, 364	Runyan, Alonzo, Catawba, Ohio. Grain-drill	Nov. 26, 1878	923	270	14	815
	Rupert, John A. (See Comey, Frank E., assignor.)					
206, 487	Rupert, John A., assignor of one-half interest to W. A. Beatty & Co., Pawtucket, R. I. Button and stud	July 30, 1878	1184	340	14	174
209, 925	Rupertus, Jacob, Philadelphia, Pa. Breech-loading fire-arms	Nov. 12, 1878	420	126	14	741
208, 901	Rushton, Thomas H., and James Macqueen, Bolton, England. Combing-machine	Oct. 15, 1878	586	171	14	578
200, 345	Rushworth, John, New York, N. Y. Friction-drum for hoisting-machines	Feb. 12, 1878	465	137	13	812
205, 580	Rusk, Samuel E., Catskill, N. Y. Telephone call-signal	July 2, 1878	123	37	14	25
201, 051	Russell, Abraham A., Polo, Ill. Implement for cleaning horses	Mar. 5, 1878	232	73	13	450
	Russell, Albert B., et al. (See Phillips, Phineas W., assignor) (Reissue.)					
	Russell, C. W., et al. (See Wheeler & Loring, assignors.)					
	Russell, Charles W., et al., trustees. (See Loring, David B., assignor) (Reissue.)					
8, 471	Russell, Edwin F., Jamaica, Vt., assignor, by mesne assignments, to Edward W. Vaill. Folding rocking-chair	Oct. 29, 1878	1198	348	14	671
205, 215	Russell, Eli F., San Francisco, Cal. Amalgamator	June 25, 1878	854	253	13	1137
	Russell & Erwin Manufacturing Company. (See Parker, Emory, assignor.)					
	Same. (See Parker & Jones, assignors.)					
210, 469	Russell, George H., Cheyenne, Wyo. Device for transmitting motion	Dec. 3, 1878	82	21	14	835
	Russell, George H., et al. (See Claude, Louis G., assignor.)					
	Russell, George S. (See Hollis, George F., assignor.)					
	Russell, George W. (See Carroll, Joseph, assignor.)					
203, 501	Russell, Henry, New Richmond, Wis. Mop-wringer	May 7, 1878	276	79	13	858
	Russell, J. E., et al. (See Wheeler & Loring, assignors.)					
199, 228	Russell, Jacob, Newark, N. J. Manufacture of horseshoes	Jan. 15, 1878	529	156	13	99
208, 337	Russell, John A., Elizabeth, assignor of one-half interest to Harvey Wilcox, Union Township, N. J. Scaffold	Sept. 24, 1878	829	242	14	466
210, 561	Russell, John C., Salter's Station, S. C. Vehicle	Dec. 3, 1878	187	50	14	847
204, 763	Russell, John Collins, Kensington, England. Composition pavement	June 11, 1878	351	.....	13	1064
	Russell, John E., et al., trustees. (See Loring, David B., assignor) (Reissue.)					
	Russell, John W., et al. (See Harper, Charles A., assignor.)					
208, 694	Russell, Robert S., Brownsville, Tenn. Car-coupling	Oct. 8, 1878	257	73	14	531
204, 454	Russell, Romulus S. T., Stanton, Del. Flour-bolt feeder, &c.	June 4, 1878	37	12	13	1018
202, 475	Russell, Samuel, Lewisville, assignor of one-half interest to Alfred Cox, Spiceland, Ind. Washing-machine	Apr. 16, 1878	658	193	13	700
	Russell, William A. (See Cushman, Francis A., assignor) (Reissue.)					
	Russenberger, Martin. (See Broseman, Russenberger & Rosenstock.)					
202, 876	Rutan, Peter, Sulphur Springs, Ohio. Elevating-ladder	Apr. 23, 1878	1114	320	13	764
	Ruthenburg, Marcus. (See Ruthenburg, Solomon and Marcus.)					
199, 168	Ruthenburg, Solomon and Marcus, Cincinnati, Ohio. Cotton-harvester	Jan. 15, 1878	473	139	13	90
203, 780	Rutherford, Adam, Walla Walla, Wash. Adjustable trace-fastening	May 14, 1878	584	164	13	906
204, 764	Rutherford, William Bryson, and Joel Turnham Hawkins, Rockdale, Tex. Bale-tie	June 11, 1878	354	106	13	1064
205, 423	Ruthrauff, John Mosheim, Washingtonville, Ohio. Harvester	June 25, 1878	1072	317	13	1165
	Rutledge, Andrew. (See Knowlton & Rutledge.)					
206, 620	Ryan, Daniel E., New York, N. Y. Waistcoat	July 30, 1878	1319	379	14	191
202, 123	Ryan, James, Honesdale, Pa. Crimping-form	Apr. 9, 1878	284	83	13	644
206, 830	Ryan, John Franklin, Mayville, Ky. Plow-standard	Aug. 6, 1878	175	55	14	228
203, 198	Ryan, John J., Midland, Mich. Log-tongs	Apr. 30, 1878	1451	424	13	812
202, 759	Ryan, Joseph, Saint Louis, Mo. Steam-trap	Apr. 23, 1878	987	284	13	748

*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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209, 518	Ryan, Joseph, Saint Louis, Mo. Cylinder-cock.....	Oct. 29, 1878	1169	{ 339 } 340	{ 14 } 14	667
207, 306	Ryan, Patrick S., Rutland, Vt. Insect-destroyer.....	Aug. 20, 1878	684	203	14	299
209, 837	Ryan, William M., Moline, Ill. Post-hole digger and transplanter.....	Nov. 12, 1878	333	99	14	729
200, 092	Ryder, Benjamin F., New Haven, assignor to M. W. Foster, Danbury, Conn. Sewing-machine caster.....	Feb. 5, 1878	203	64	13	265
206, 488	Ryerson, Jonathan R. (See Ryerson, Richard Dexter, assignor.) Ryerson, Richard Dexter, Clinton, assignor to self and Jonathan R. Ryerson, Dexter, Me. Stove-leg.....	July 30, 1878	1185	341	14	174
204, 507	Ryerson, William Martin, Newton, N. J. Harness-saddle tree.....	June 4, 1878	81	28	13	1024
210, 150	Rynerson, Robert A., Bowen's Prairie, Iowa. Combined land-roller and clod-crusher.....	Nov. 19, 1878	677	201	14	779
208, 695	Sabin, Cyrus Lawton, Washington, D. C. Butter-package.....	Oct. 8, 1878	258	74	14	531
209, 716	Sachs, William, Berlin, Prussia, Germany. Fountain-pen.....	Nov. 5, 1878	194	57	14	707
206, 974	Sackenreuther, George Paul. (See Voth, Sackenreuther & Hefft.) Sackett, Charles E., Matilda Furnace, Mifflin County, Pa. Cultivator.....	Aug. 13, 1878	334	{ 102 } 103	{ 14 } 14	251
199, 581	Sackett, E. Wells. (See Kurtzmann, John O., assignor.) Sacksteder, John, Louisville, Ky. Bottle-capper.....	Jan. 22, 1878	893	262	13	164
207, 554	Safford, S. H. (See Bancroft & Walker, assignors). (Reissue.) Sager, Daniel, Omaha, Nebr. Harvester.....	Aug. 27, 1878	962	282	14	339
201, 704	Sahlfeld, Frederick, New York, N. Y., assignor to self and George Pustkuchen, Hoboken, N. J. Apparatus for obtaining glycerine from fats.....	Mar. 26, 1878	929	285	13	567
198, 817	Sailor, Isaac O., Montgomery City, Mo. Stump-extractor.....	Jan. 1, 1878	97	27	13	23
8, 135	Saladee, Cyrus W., Wolcottville, Conn. Torsion-spring for vehicles..... (Reissue.)	Mar. 26, 1878	1091	331	13	591
209, 426	Saladee, Cyrus W., Washington, D. C. Vehicle-spring.....	Oct. 29, 1878	1070	310	14	653
210, 635	Same..... Road-wagon.....	Dec. 10, 1878	279	70	14	869
210, 636	Same..... same.....	Dec. 10, 1878	280	76	14	869
210, 637	Same..... Fifth-wheel coupling-yoke for wagons.....	Dec. 10, 1878	281	77	14	869
207, 133	Salisbury, George P., and Henry C. Smith, New Haven, Conn. Steam-boiler.....	Aug. 20, 1878	508	153	14	277
203, 199	Salisbury, Silas C., New York, N. Y. Hydrocarbon compound for fuel.....	Apr. 30, 1878	1452	.....	13	812
204, 094	Same..... Utilizing hot air.....	May 21, 1878	928	266	13	957
205, 143	Same..... Apparatus for burning hydrocarbons.....	June 18, 1878	765	{ 226 } 227	{ 13 } 13	1120
200, 482	Salisbury, Wilber S., Battle Creek, Mich., assignor of one-half interest to Henry J. Brimmer, Adams, N. Y. Coil steam-generator.....	Feb. 19, 1878	611	180	13	343
200, 938	Salisbury, Wilber S., Chicago, Ill., assignor of one-half interest to H. J. Brimmer, Adams, N. Y. Water-coil steam-generator.....	Mar. 5, 1878	116	39	13	433
205, 425	Sallada, William H., Monroe, Iowa. Carpet stretcher and fastener.....	June 25, 1878	1074	318	13	1166
210, 563	Salmon, Ira A., Boston, assignor of one-half interest to David S. Fogg, Norwood, Mass. Apparatus for heating apartments, railway-cars, &c.....	Dec. 3, 1878	189	50, 51	14	848
204, 095	Salmon, John F. (See Salmon & Harris.) Salmon, Narcisse, and Albert Delavrière, Paris, France. Shirt or sleeve stud.....	May 21, 1878	930	266	13	957
209, 838	Salmon, William C. and John F., and William H. Harris, Portland, Oreg. Mill for grinding ore.....	Nov. 12, 1878	333	{ 99 } 100	{ 14 } 14	729
203, 200	Salomon, Siegmund L., Charles F. Knoch, and George A. Semel, New York, N. Y. Can-labeling machine.....	Apr. 30, 1878	1452	424	13	812
202, 667	Salter, John, jr., assignor to H. B. Smith Machine Company, Smithville, N. J. Loose pulley.....	Apr. 23, 1878	894	256	13	736
208, 696	Salter, John H., Saint Mary's, Pa. Magazine fire-arm.....	Oct. 8, 1878	259	74	14	531
209, 717	Sames, Peter. (See Bigalow, Frederick, assignor.) Sammons, Thomas A., Lewisburg, W. Va. Corn-planter.....	Nov. 5, 1878	194	58	14	707
201, 839	Sample, James, John Grantham, and William M. Ward, Blyth, and Matthew Waddle, Newsham, near Blyth, England. Wooden key for securing railway-rails.....	Mar. 26, 1878	1067	325	13	588
202, 054	Sampson, William P. (See Sandford & Sampson.) Sampson, William S. (See Pope & Sampson.) Samson, William, Berkshire, Vt. Effless-tread horse-power link.....	Apr. 2, 1878	193	56	13	626
201, 052	Samuelson, Bernhard, and William G. Manwaring, Banbury, England. Manufacturing the fingers of harvesting-machines.....	Mar. 5, 1878	232	73	13	450
201, 202	Samuelson, Moses, New York, N. Y. Ash and garbage vault.....	Mar. 12, 1878	382	118	13	489
200, 939	Sanborn, Albert A. (See Sanborn, Kanouse & Sanborn.) Sanborn, Rufus H., Charles O. Kanouse, and Albert A. Sanborn, Newark, N. J. Collar and cuff.....	Mar. 5, 1878	117	39	13	433
199, 317	Sander, John, Newark, N. J. Meat-chopping machine.....	Jan. 15, 1878	622	180	13	113
210, 471	Sanderling, John C., San Francisco, Cal. Pulverizing-barrel.....	Dec. 3, 1878	85	21	14	835
208, 268	Sanders, Benjamin D., Wellsburg, W. Va. Flour-bolt.....	Sept. 24, 1878	760	223	14	457
208, 269	Same..... Dressing millstones.....	Sept. 24, 1878	762	.....	14	458
204, 616	Sanders, Benjamin F., Robert G. Dildine, and Benjamin F. Head, Pardee, Kans. Washing-machine.....	June 4, 1878	197	63	13	1040
200, 411	Sanders, Daniel B., and Junius Smith, Burlington, Mich. Feather-renovator.....	Feb. 19, 1878	540	160	13	332
210, 564	Sanders, Daniel B., Burlington Mich. Feather-renovator.....	Dec. 3, 1878	191	51	14	848
199, 937	Sanders, Ebenezer A., Rockford, Ill. Rolling colter.....	Feb. 5, 1878	50	16	13	240
204, 253	Same..... Plow-clevis.....	May 28, 1878	1119	320	13	985
210, 055	Sanders, Edwin, Maitland, Yarmouth, Nova Scotia, Canada. Pump.....	Nov. 19, 1878	573	172	14	765
205, 424	Sanders, Frary & Clark. (See Webb, Rodolphus L., assignor.) Sanders, Mervin M., New Baltimore, Mich. Washing-machine.....	June 25, 1878	1073	{ 317 } 318	{ 13 } 13	1166
204, 378	Sanders, Richard David, Birmingham, England. Brake for railway-carriages.....	May 28, 1878	1246	{ 354 } 355	{ 13 } 13	1001
206, 975	Sanders, William H. (See Driver, Luna, Sanders & Hill.) Sanderson, Robert, Cleveland, Ohio. Cut-off valve for steam-engines.....	Aug. 13, 1878	336	103	14	251
200, 767	Sanderson, Robert Bodine, Bridgewater, Pa. Bracket.....	Feb. 26, 1878	916	269	13	397
203, 378	Sandford, James L., and William P. Sampson, Binghamton, N. Y. Mop holder and wringer.....	May 7, 1878	150	43	13	841
209, 361	Sandford, L. M., et al. (See Weymouth, John W., assignor.) Sandmeyer, J. Heinrich, Chicago, Ill. Watchmaker's lathe.....	Oct. 29, 1878	1004	292	14	643
204, 999	Sandner, Henry, Hoboken, N. J. Scarf-fastening.....	June 18, 1878	624	182	13	1101
206, 976	Sands, Charles A., Burlington, Kans. Sack for baling hops.....	Aug. 13, 1878	337	103	14	251
206, 977	Same..... Hop-press.....	Aug. 13, 1878	337	103	14	251
209, 519	Sands, Sarah T., New York, N. Y. Apparatus for lifting and carrying invalids.....	Oct. 29, 1878	1171	340	14	667
200, 410	Sandusky, Isaac B., Fayette County, Ky. Seed-cleaning machine.....	Feb. 19, 1878	540	159	13	332
199, 318	Sanford, Charles M., Hauppauge, N. Y. Girth for harness.....	Jan. 15, 1878	622	181	13	113
207, 685	Sanford, Edwin Smith, Grove, Ohio. Fence-post.....	Sept. 3, 1878	100	30	14	301
204, 916	Sanford, Erastus M. (See Reid & Sanford.) Sanford, Frank V., Chelsea, Mass., assignor of one-half interest to Joseph W. Bartlett, New York, N. Y. Circuit-changer in electric gas-lighting apparatus.....	June 18, 1878	540	{ 157 } 158	{ 13 } 13	1000

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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205, 910	Sanford, Gelston. (See Palmatier, Stanton, assignor.)					
	Sanford, Gelston, Brooklyn, assignor to Mallory & Sanford American and Foreign Flax and Hemp Dressing Machine Company, New York, N. Y. Hemp and flax brake	July 9, 1878	490	141	14	75
205, 911	Same..... Fiber-machine	July 9, 1878	409	142	14	76
201, 451	Sanford, Samuel Trip, Norton, Mass. Fastening for shoes	Mar. 10, 1878	663	202	13	525
204, 615	Sanford, William H., assignor of one-half interest to John E. Griffiths, Detroit, Mich. Money-bag fastener	June 4, 1878	190	62	13	1040
199, 997	Sangster, Amos W., assignor of one-half interest to E. M. Jewett, Buffalo, N. Y. Ozone-generator	Feb. 5, 1878	104	34	13	249
	Sangster, Hugh. (See Menaar & Sangster.)					
202, 760	Sangster, James, Buffalo, N. Y. Postage-stamp	Apr. 23, 1878	968	284	13	748
	Sanner, F. D. (See Sanner, James B. and F. D.)					
204, 455	Sanner, James B., and F. D., Baltimore, Md. Boiler-covering	June 4, 1878	39	8	13	1018
	Sapp, Leo W. (See Richards, Charles, assignor.)					
204, 096	Sarchet, George B., Charleston, Ill. Sash-lock	May 21, 1878	931	266	13	957
199, 938	Sard, Grange, jr., assignor to self and Rathbone, Sard & Co., Albany, N. Y. Stove-door	Feb. 5, 1878	51	16	13	240
	Sargeant, Abraham V. (See Sargeant, Samuel S. and Abraham V.)					
201, 452	Sargeant, Samuel S., Newark, N. J. Trace-carrier	Mar. 19, 1878	663	202	13	525
209, 427	Sargeant, Samuel S. and Abraham V., Newark, N. J. Gig-saddle	Oct. 29, 1878	1071	311	14	053
	Sargent, Allen C. (See Sargent, Frederick and Allen C.)					
	Sargent & Co. (See Brocklepeper, Frederick W., assignor.)					
	Same..... (See Steele, David, assignor.)					
206, 489	Sargent, Frederick G., Graniteville, Mass. Wool-washing machine	July 30, 1878	1186	341	14	174
207, 626	Same..... Belting for wool-washers	Sept. 3, 1878	42	13	14	554
209, 138	Same..... Wool-washing machine	Oct. 22, 1878	773	{ 224 225 }	14	608
210, 565	Same..... Burring-machine	Dec. 3, 1878	103	51	14	848
207, 417	Sargent, Frederick G. and Allen C., Graniteville, Mass. Burring-cylinder	Aug. 27, 1878	847	250	14	324
8, 495	Sargent, J. B., New Haven, Conn., assignor, by mesne assignments, to Charles C. Post, Burlington, Vt. Sap-spout (Reissue.)	Nov. 19, 1878	708	211	14	783
199, 582	Sargent, James, Rochester, N. Y. Trap for water-closets, &c.	Jan. 22, 1878	894	262	13	164
200, 093	Same..... Trap for drains, sewers, &c.	Feb. 5, 1878	204	64	13	265
200, 573	Same..... Sewer-trap	Feb. 19, 1878	700	206	13	857
210, 807	Same..... Lock	Dec. 10, 1878	456	128	14	892
205, 106	Sargent, James B., et al. (See Gray, Richard, assignor.)					
207, 134	Sargent, James J., Peoria, Ill. Clothes-drier	June 18, 1878	725	216	13	1115
	Sargent, James T., assignor to Joseph H. Lapham, Cleveland, Ohio. Wash-board	Aug. 20, 1878	509	154	14	277
204, 765	Sarlls, Rufus, and Alexander Kelman, Navasota, Tex.; said Sarlls assignor to Alexander Kelman. Combined planter, cultivator, and cotton-chopper	June 11, 1878	354	106	13	1064
203, 502	Sarmiento, Ferdinand Louis, Philadelphia, Pa. Support or picket for strengthening fences	May 7, 1878	277	79	13	850
202, 965	Sarven, James D., Columbia, Tenn. Carriage-spring	Apr. 30, 1878	1216	351	13	781
210, 272	Sassinet, Louis Romain, New Orleans, La. Portable furnace	Nov. 20, 1878	819	242	14	801
200, 669	Satterwhite, Harvey, Martintown, Ind. Toe-weight for horses	Feb. 20, 1878	818	241	13	382
203, 050	Sauer, Martin, Friedrich, Mononauk, Ill. Horse-collar	May 14, 1878	440	127	13	889
203, 781	Saueressig, Peter, New York, N. Y. Leader-pipe (Reissue.)	May 14, 1878	585	104	13	906
204, 254	Saunders, A. H. (See Saunders, Benjamin, assignor.)					
8, 117	Saunders, Andrew, assignor to D. Saunders' Sons, Yonkers, N. Y. Chuck	May 28, 1878	1120	320	13	985
	Saunders, Benjamin, Nashua, N. H., assignor, by mesne assignments, to A. H. Saunders. Machine for dressing or sizing yarn (Reissue.)	Mar. 12, 1878	519	{ 158 159 }	13	497
203, 948	Saunders, Irvin Jasper, Coleman Station, Ga. Plow-stock	May 21, 1878	774	222	13	938
	Saunders, John S. (See Ives, Hiram L., assignor.)					
203, 947	Saunders, Joseph, Brooklyn, N. Y. Steam-valve	May 21, 1878	773	221	13	938
207, 074	Saunders' Sons, D. (See Saunders, Andrew, assignor.)					
207, 986	Saunders, William M., Alfred Centre, N. Y. Hay-tedder	Aug. 13, 1878	431	133	14	263
	Same..... Horse hay-rake	Sept. 10, 1878	432	130	14	407
8, 179	Savage, Brigham M. (See Collinge & Savage.)					
	Savage, George E., assignor to Meriden Britannia Company, West Meriden, Conn. Butter-dish (Reissue.)	Apr. 16, 1878	836	241	13	721
	Savage, J. B. (See Decble, John, assignor.)					
	Same..... (See Morse, Edward F., assignor.)					
201, 203	Savage, S. S., et al. (See Roberts, Edward J., assignor.)					
210, 056	Savage, William Henry Giles, Kingston, Ontario, Canada. Brush-bridler	Mar. 12, 1878	383	118	13	480
	Same..... Permutation-lock	Nov. 19, 1878	575	172	14	765
200, 876	Sawyer, Abby A. (See Lombard, Nathan C., assignor.)					
202, 055	Sawyer, Addison M., Athol, Mass. Canister-shot	Mar. 5, 1878	63	22	13	425
209, 520	Same..... same	Apr. 2, 1878	193	56	13	626
204, 097	Sawyer, Caleb K., Clinton, Mass. Wire-holder for making fence cables	Oct. 29, 1878	1173	340	14	608
	Sawyer, Charles E., Boston, Mass. Machine for counting labels, &c.	May 21, 1878	932	{ 266 267 }	13	957
204, 098	Sawyer, Charles E., assignor of one-half interest to E. Lamson Perkins, Boston, Mass. Finishing the surfaces of paper or cloth	May 21, 1878	933		13	957
203, 070	Sawyer, Francis A., 2d, Boston, Mass. Carriage-step	Apr. 30, 1878	1320	384	13	795
210, 476	Sawyer, Francis A., 2d, assignor to Rubber Step Manufacturing Company, Boston, Mass. Carriage-step	Dec. 3, 1878	83	21	14	835
201, 705	Sawyer, Frederick A., Houston, Tex. Vapor-burner	Mar. 26, 1878	930	285	13	568
210, 808	Sawyer, Henry, Chelsea, Mass. Bluing-package	Dec. 10, 1878	457	129	14	892
	Sawyer, James T. (See Wilkins, William F., assignor.)					
208, 037	Sawyer, John, 3 Adelaide Place, London Bridge, England. Means of obtaining arithmetical results	Sept. 17, 1878	501	149	14	421
	Sawyer, Lodowick L. (See Buckley & Sawyer.)					
	Sawyer Manufacturing Company. (See Dingee, William W., assignor.)					
	Sawyer, Nelson. (See Grant, Sawyer & Gardner.)					
	Sawyer, Samuel W. (See Smith, Philester, assignor.)					
205, 144	Sawyer, William Edward, New York, and Albon Man, Brooklyn, N. Y. Electric lamp	June 18, 1878	767	227	13	1120
205, 303	Same..... Electric lighting system	June 25, 1878	947	281	13	1140
205, 305	Same..... Regulator for electric lights	June 25, 1878	951	282	13	1150
210, 151	Sawyer, William Edward, New York, N. Y. Electric meter	Nov. 19, 1878	677	202	14	770
210, 152	Sawyer, William Edward, New York, and Albon Man, Brooklyn, N. Y. Switch for electric lights	Nov. 19, 1878	679	202	14	770
210, 809	Same..... Electric lamp	Dec. 10, 1878	459	129	14	892
205, 687	Saxby, Stephen D., Trumton, Mo. Reciprocating-churn attachment	July 2, 1878	239	71	14	39
	Saxton, E. R. (See Amidon, Charles H., assignor.)					

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page
203, 503	Sayers, George S., and Thomas Galligan, Hyde Park, Pa. Clothes-line holder .....	May 7, 1878	278	80	13	859
208, 338	Scales, John C., Chicago, Ill. Receptacle for articles to be screened ..	Sept. 24, 1878	831	243	14	467
201, 559	Scanlan, Charles A., assignor of one-fifth interest to Elisha L. Halsey, Charleston, S. C. Dredging-tongs .....	Mar. 19, 1878	771	235	13	540
204, 255	Seannell, Michael William, Williamsport, Pa. Kitchen-sink .....	May 28, 1878	1121	320	13	985
201, 291	Scarritt, James, jr., assignor of one-half interest to Harvey C. and Charles W. Hull, Prophetstown, Ill. Fastening for chair-legs .....	Mar. 12, 1878	481	147	13	493
205, 581	Scarritt, Nathan, Kansas City, Mo. Clothes-drier .....	July 2, 1878	124	37	14	25
8, 173	Scattergood, John R., Newark, N. J., assignor, by mesne assignments, to George H. Kitchen & Co. Gas-lighter .....	Apr. 16, 1878	827	239	13	710
199, 747	Scattergood, John R., Newark, N. J. Gas-lighter .....	Jan. 29, 1878	1085	318	13	201
201, 706	Scattergood, Theodore, Mankato, Minn. Carriage-top .....	Mar. 26, 1878	931	285	13	568
204, 256	Schade, John, and Byron H. Lockwood, assignors to selves and George H. Sherman, Stamford, Conn. Envelope .....	May 28, 1878	1122	320	13	985
203, 296	Schaefer, Frank. (See Horn, Schaefer & Wehrle.) .....	May 7, 1878	64	20	13	829
204, 685	Schaefer, Peter, Lake, Chicago, P. O., Ill. Draw-bridge gate .....	June 11, 1878	269	83	13	1054
205, 306	Schaefer, Peter, Saint Peter, Minn. Heater regulator and damper combined ..	June 25, 1878	953	282	13	1150
200, 340	Schall, William H., assignor of one-half interest to Louis Weber and Joseph Smith, Latrobe, Pa. Nut-lock .....	Feb. 12, 1878	466	137	13	313
202, 056	Schallenberger, George, Rochester, assignor to James H. Doherty and Christian Blattner, Bridgewater, Pa. Crimping-board for boots and shoes .....	Apr. 2, 1878	194	57	13	626
210, 960	Scharf, Samuel R., Washington, D. C., assignor to self and George W. Hooker, Brattleborough, Vt. Velocipede .....	Dec. 17, 1878	661	182	14	925
201, 359	Scharfberg, Mendal, assignor of one-third interest to Marcus Lowendahl, Vienna, Austria, and Max Gutman, Dresden, Saxony. Anti-friction eccentrics .....	Mar. 19, 1878	571	175 } 176 }	13	512
207, 307	Scharnweber, Henry C., and Edmond Barkham, Commerce, Mich. Corn-sheller .....	Aug. 20, 1878	685	204	14	299
207, 686	Scharnweber, William. (See Felix & Scharnweber.) .....	Sept. 3, 1878	101	30	14	361
206, 400	Schaschue, Charles, Rondout, N. Y. Grain-scouring machine .....	July 30, 1878	1187	341	14	174
202, 590	Schatz, Adam E., New York. Whiffletree .....	Apr. 16, 1878	792	228	13	715
209, 521	Schaumburg, Frank, Cruger, Ill. Harrow .....	Oct. 29, 1878	1173		14	668
198, 999	Schedler, Joseph, Jersey City Heights, N. J. Tellurian .....	Jan. 8, 1878	291	85	13	61
200, 670	Scheider, Joseph, New York, N. Y. Gravy-strainer .....	Feb. 26, 1878	819	241	13	382
200, 846	Scheil, J. A. (See Jamieson, Willburn W., assignor.) .....	Mar. 5, 1878	34	12	13	420
209, 522	Schenck, Edwin, Baltimore, Md. Device for loading cartridges .....	Oct. 29, 1878	1174	341	14	668
201, 707	Schenck, William H., Auburn, W. Va. Vehicle-axle brace .....	Mar. 26, 1878	931	285	13	568
206, 831	Schermerhorn, John G., Bloomington, Ill. Paper box .....	Aug. 6, 1878	176	56	14	228
207, 211	Schermerhorn, William S. (See Betts, Stephen N., assignor.) .....	Aug. 20, 1878	587	176	14	287
199, 229	Scherring, Hugo, et al. (See Leggett, Edward W., assignor.) .....	Jan. 15, 1878	530	156	13	99
203, 201	Scheu, Gottlob J., Washington, Pa. Shoulder-pad .....	Apr. 30, 1878	1454	425	13	812
205, 912	Scheuer, Isaac, New York, N. Y. Satchel, traveling-bag, &c .....	July 9, 1878	500	142	14	76
204, 379	Schiele & Co., Lewis. (See Gutman, Seligman, assignor.) .....	May 28, 1878	1248	355	13	1001
210, 566	Schiller, Charles, Baltimore, Md. Meat-cutting machine .....	Dec. 3, 1878	194	51	14	848
208, 855	Schilling, D. (See Rau, Adolph H., assignor.) .....	Oct. 8, 1878	432	125 } 126 }	14	554
202, 668	Schilling, Gustav, assignor of one-half interest to Carl G. Von Platen, Chicago, Ill. Catamenial sack .....	Apr. 23, 1878	894	256 } 257 }	13	736
209, 627	Schimper Brothers. (See Blust, Charles, assignor.) .....	Nov. 5, 1878	99	29	14	694
209, 083	Schindler, Otto, Gallatin, Tenn. Clothes-pounder .....	Oct. 15, 1878	696	201	14	592
208, 038	Schinneller, Jacob. (See Fitzpatrick & Schinneller) .....	Sept. 17, 1878	502	149	14	421
204, 766	Schleber, Henry H., Rochester, N. Y. Shot-cartridge .....	June 11, 1878	356	107	13	1064
204, 917	Schleicher, Conrad, and John and Joseph Mackert, Springfield, Ohio. Machine for producing ventilation .....	June 18, 1878	543	158	13	1091
199, 160	Schleicher, Gustav, Mount Vernon, N. Y. Circular sawing machine .....	Jan. 15, 1878	474	140	13	90
210, 154	Schley, Frederick, New York, N. Y. Insertible saw-teeth .....	Nov. 19, 1878	682	202	14	780
205, 688	Schluter, Rudolph, New York, N. Y. Propeller-sleigh .....	July 2, 1878	240	71, 72	14	39
201, 840	Schluter, Rudolph, New York, N. Y. Apparatus for wetting malt preparatory to mashing .....	Mar. 26, 1878	1068	325	13	588
200, 523	Schnable, Martin, Dayton, Ohio, assignor to Edwin P. Munroe, Newark, N. J. Piston-packing .....	Oct. 29, 1878	1175	341	14	668
204, 917	Schmelzpfennig, Hermann, Campbellsburg, Ky. Washing-machine .....	May 28, 1878	1248	355	13	1001
199, 160	Schmickl, Mathias, assignor to self and William Roemer, Newark, N. J. Chandelier for oil-burners .....	June 11, 1878	446	130	13	1074
210, 154	Schmidt, Christian, Lancaster, Pa. Double-acting force-pump .....	July 9, 1878	340	98, 99	14	55
205, 688	Schmidt, Constantine. (See Meineke, Heinrich, assignor.) .....	May 14, 1878	586	164	13	906
201, 840	Schmidt, Constantine, New York, N. Y. Calendar and pen-rack .....	Aug. 13, 1878	432	134	14	263
200, 523	Schmidt, Georg, Wauwatosa, Wis. Straw-cutter .....	Aug. 20, 1878	686	204	14	299
204, 380	Schmidt, H. Frank, Quincy, Ill. Beer-cooler .....	May 21, 1878	934	267	13	958
204, 847	Schmidt, John G., Rochester, N. Y. Faucet .....	July 16, 1878	645	187	14	99
205, 765	Schmidt, Julius Gustav, Berlin, Prussia, Germany. Steam-boiler .....	Mar. 5, 1878	35	12	13	420
203, 782	Schmidt, Rudolph, Yonkers, assignor to Otis Brothers & Co., New York, N. Y. Hydraulic elevator .....	July 16, 1878	645	187	14	99
207, 075	Schmitt, Christian, New Haven, Conn. Hanging carriages .....	Mar. 5, 1878	35	12	13	420
207, 308	Schmitter, Anton, Paterson, N. J. Caliper .....	July 16, 1878	645	187	14	99
204, 099	Schmitz, Balhasur, Brooklyn, N. Y. Apparatus for making extracts of coffee ..	Aug. 13, 1878	432	134	14	263
206, 043	Schmitz, Joseph Peter, and Herbert Warren Cooper, Winona, Minn. Horse-collar clamp .....	Aug. 20, 1878	686	204	14	299
200, 847	Schmuck, S. H. (See Lyman, Fordyce A., assignor.) .....	May 21, 1878	934	267	13	958
206, 044	Schneider, Alexander, assignor of one-half interest to Louis Wellendorf, Youngstown, Ohio, Lock .....	July 16, 1878	645	187	14	99
206, 265	Schneider, Anton, New York, N. Y. Bung .....	Mar. 5, 1878	35	12	13	420
8, 066	Schneider, Bennett B., New York, N. Y. Lamp .....	July 16, 1878	645	187	14	99
8, 067	Same same same .....	July 23, 1878	911	259	14	136
8, 250	Same same same .....	Jan. 29, 1878	1231	361	13	223
	Schneider, Charles C. (See Whitham & Schneider.) .....	Jan. 29, 1878	1231	361	13	224
	Schneider, John. (See Miller & Schneider.) .....	May 21, 1878	974	278	13	962
203, 651	Schneider, John, Indianapolis, Ind. Ice-house .....	May 14, 1878	446	127 } 128 }	13	589



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207, 309	Schneider, John C., Chicago, Ill. Snap-hook	Aug. 20, 1878	686	204	14	300
199, 471	Schneider, Joseph, La Fayette, Ind. Marking-pen	Jan. 22, 1878	779	229	13	146
204, 381	Schneiderlochner, Antony, Pittsburg, Pa. Machine for making bridge-eyes	May 28, 1878	1249	356	13	1001
199, 319	Schnell, Louis C., Akron, Ohio. Clinometer	Jan. 15, 1878	623	181	13	113
205, 145	Schnessler, John, assignor of one-fourth interest to Elias Schnessler, Attica, Ind. Turbine water-wheel	June 18, 1878	771	227 228	13	1121
208, 270	Schoals, John R., Boston, assignor to Martin W. Carr, Somerville, and Hiram W. Brooks, Cambridge, Mass. Clasp	Sept. 24, 1878	763	223	14	458
208, 039	Schoch, Martin L., New Berlin, Pa. Book-support	Sept. 17, 1878	503	150	14	421
207, 448	Schoenleben, Adolph Wilhelm, Bitterfeld, Prussia. Flour-bolting machine	Aug. 27, 1878	848	250	14	324
205, 427	Schofield, Charles, and Robert Wilde, Philadelphia, Pa. Feeding-device for carding-machine	June 25, 1878	1076	318 319	13	1166
200, 877	Schofield, Cyrus N., Oshkosh, Wis. Vehicle-spring	Mar. 5, 1878	64	22	13	425
8, 354	Schofield, George W., United States Army. Revolving fire-arm. (Reissue.)	July 30, 1878	1363	391	14	196
211, 058	Schofield, Jacob, and David D. Pryor, Newton, Iowa. Steam-generator	Dec. 17, 1878	775	212	14	939
201, 709	Schofield, John, Cheyenne City, Wyo. Flooring-clamp	Mar. 20, 1878	932	286	13	568
206, 622	Schofield, John S., Macon, Ga. Cane-mill	July 30, 1878	1321	380	14	191
199, 999	Schofield, Silas C., Freeport, Ill. Grinding-mill	Feb. 5, 1878	106	35	13	250
210, 153	Scholes, Frederick, Brooklyn, N. Y. Coal-cart	Nov. 19, 1878	681	202	14	780
207, 899	Scholes, Henry B., Brooklyn, N. Y. Combined bedstead and fire-escape	Sept. 10, 1878	341	103	14	395
209, 362	Schoell, John, Elk Grove, Cal. Grain-spout	Oct. 29, 1878	1006	292	14	643
207, 369	Scholle, Charles H., Cincinnati, Ohio. Lamp	Aug. 27, 1878	762	227	14	315
204, 918	Scholler, Henry W., Edinburg, Ind. Press for extracting water from starch and other substances	June 18, 1878	544	158	13	1091
210, 713	Schollian, Gottlieb, Dubuque, Iowa. Overall	Dec. 10, 1878	357	98	14	878
200, 768	Schoonmaker, James W., assignor of one-half interest to Thomas J. Garvey, Albany, N. Y. Sliding-door lock	Feb. 26, 1878	916	270	13	397
203, 652	Schott, John B., et al. (See Chadwick, Charles, assignor.) Schramling, Frederick, sr., and Eugene Sue Day, assignors to selves and Joseph C. Day, Sabula, Iowa. Oatmeal-machine	May 14, 1878	448	128	13	889
209, 194	Schraubstadter, Carl, et al. (See Bettis, James R., assignor.)	Oct. 22, 1878	831	240	14	616
200, 574	Schreiber, Adolf, Brooklyn, N. Y. Lamp-wick attachment	Feb. 19, 1878	701	206	13	357
199, 470	Schreiber, Franz, and Anton Weigand, New York, N. Y. Insect-trap	Jan. 22, 1878	778	229	13	146
204, 456	Schreiber, Lonhard, Cincinnati, Ohio. Machine for pitching casks	June 4, 1878	39	13	13	1018
199, 665	Schreiber, Henry, Philadelphia, Pa. Car-starter	Jan. 29, 1878	1010	294	13	189
208, 040	Same	Sept. 17, 1878	504	150	14	421
202, 476	Schreiner, John H. (See Remillon, Eugene J., assignor.) Schrenkeisen, H., et al. (See Travis, Joseph H., assignor.) (Reissue.) Schrenkeisen, M., et al. (See Travis, Joseph H., assignor.) (Reissue.) Schrenkeisen, Martin, New York, N. Y. Rocking-chair	Apr. 16, 1878	659	193	13	700
205, 689	Schreurs, Garrett W. (See Donnel, John Wesley, assignor.)	July 2, 1878	241	72	14	39
206, 832	Schreyer, Gottlieb, Columbus, Ohio. Axle-skein	Aug. 6, 1878	176	56	14	228
201, 952	Schröder, Carl Wilhelm, and Frederik Julius Jørgensen, assignors to Anker Høegaard, Copenhagen, Denmark. Converting motions Schroder, J. B. (See Burke, John G., assignor.) Schroder, J. Lee, Hamilton, Ohio, assignor of one-half interest to Jervias Hargitt. Ball-trap	Apr. 2, 1878	87	25	13	612
206, 266	Schroder, Nicholas, et al. (See Stevens, John L., assignor.)	July 23, 1878	912	288	14	136
207, 310	Schröder, Nicolaus, Creuznach, Prussia. Extracting fuel from waste	Aug. 20, 1878	687	205	14	300
200, 878	Schroeder, Herman, assignor to Ernst H. Vordtriede, Saint Louis, Mo. Padlock	Mar. 5, 1878	64	22	13	425
201, 708	Schroeder, Nicolaus, Davenport, Iowa. Fire-escape Schroeder, Stephen F. (See Kuntz & Schroeder.) Schuck, Aloys, jr., East New York, N. Y. Brush	Mar. 26, 1878	932	286	13	568
207, 900	Schuessler, Elias. (See Schuessler, John, assignor.)	Sept. 10, 1878	342	103	14	305
210, 156	Schülke, Julius. (See Pintschke & Schülke.)	Nov. 19, 1878	683	203	14	780
200, 347	Schulte, John F., Cincinnati, Ohio. Rocking-chair	Feb. 12, 1878	467	138	13	313
205, 428	Schultes, Peter, and Christian Walter, Mendota, Ill. Folding legs for sofa-bedsteads	June 25, 1878	1077	319	13	1166
204, 617	Schultze, August Louis, Meissen, assignor to Bernhard Röber, Dresden, Saxony. Feeding fuel to furnaces	June 4, 1878	197	63	13	1040
204, 619	Schultz, John E., Cincinnati, Ohio. Slide and steam valve	June 4, 1878	199	63	13	1040
208, 203	Schultz, Michael, Cincinnati, Ohio. Steam-pump	Sept. 17, 1878	609	197	14	443
208, 204	Schultze, Frederick E., assignor of one-half interest to Francis Ed. Meyer, New York, N. Y. Machine-gun	Sept. 17, 1878	674	198	14	444
201, 453	Same	Mar. 19, 1878	664	202	13	526
208, 561	Schulze, Paul, assignor of one-half interest to Charles E. Behle, Washington, D. C. Egg-carrier Schulze-Berge, Hermann, and Julius Barnstorf, Oberhausen, Prussia. Freeing molten iron from phosphorus	Oct. 1, 1878	104	31	14	503
203, 504	Schumacher, Ferdinand. (See Bailey, Cyrus, assignor.)	May 7, 1878	278	80	13	859
203, 653	Schupp, Martin, assignor to Weil, Livingston & Co., New York, N. Y. Pocket-book	May 14, 1878	448	128	13	889
206, 621	Schurbeck, Charles J., and Charles A. Stevenson, New York, N. Y. Loom-shuttle	July 30, 1878	1320	380	14	191
208, 856	Schürmann, Wilhelm R., Düsseldorf, Prussia. Changing speed	Oct. 8, 1878	453	126	14	554
201, 128	Same. Machine for winding and trimming textile fabrics, &c.	Mar. 12, 1878	314	96	13	409
202, 379	Schurr, August F., Pittsburg, Pa. Protector for soles of boots and shoes	Apr. 16, 1878	567	166	13	687
204, 618	Schütz, Moritz C., Boston, Mass. Traveling-bag	June 4, 1878	198	63	13	1040
208, 638	Schwab, Frederick, Pottstown, Pa. Damper for bakers' ovens	Oct. 1, 1878	186	53	14	514
210, 638	Schwander, Jean, and Joseph Herrburger, Paris, France. Piano-action	Dec. 10, 1878	282	77	14	869
208, 041	Schwanengel, Charlys W., Dayton, Ohio. Leather-skiving machine	Sept. 17, 1878	505	150	14	421
199, 748	Schwaneer, Christian Casper, Winterset, Iowa. Trace-carrier	Jan. 29, 1878	1085	318	13	201
208, 637	Schwartz, William C., assignor of one-half interest to Arthur Mallon, Philadelphia, Pa. Toy-balloon	Oct. 1, 1878	185	53	14	513
8, 508	Schwarz, A., et al. (See Boussard, Richard, assignor.) Schwarz, Adolph, New York, N. Y. Traveling-cap	Nov. 26, 1878	902	280	14	819
201, 894	Schwarz, Joseph, et al. (See Boussard, Richard, assignor.)	Apr. 2, 1878	35	10	13	604
206, 267	Schwarz, William, Koenigsberg in the Neumark, Prussia. Potato-digger	July 23, 1878	913	259	14	136
210, 882	Schwarzwald, Isaac, New York, N. Y. Ventilating boot and shoe	Dec. 17, 1878	553	155	14	913
206, 045	Schwarzwalder, Henry, New York, N. Y. Barrel-head	July 16, 1878	647	188	14	100
202, 057	Schweichard, Jacob, Kekoskee, Wis. Rotary churn	Apr. 2, 1878	196	57	13	626
	Schweitzer, Sylvanus F., and Gottlieb Kinsey, Lock Seventeen, Ohio. Sack-scales					
	Schwenck, John Charles. (See Welsh & Schwenck.)					

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200, 348 8, 171	Schwerdt, Solomon, assignor of one-half interest to J. W. Peck, Roseville, Ill. Wrench for trunks.	Feb. 12, 1878	470	138	13	313
199, 381	Schwerin, Morris, assignor to George M. Ballard and George Minchin, Newark, N. J. Apparatus for hitching and securing runaway horses. (Reissue)	Apr. 9, 1878	506	147	13	674
207, 555	Schwiers, F. William, New York, N. Y. Apparatus for hitching and securing runaway horses	Jan. 22, 1878	694	204	13	132
200, 940	Scivalley, Martin L., Winchester, Tenn. Washing-machine	Aug. 27, 1878	963	282	14	339
199, 108	Scofield, James Sylvester, Little Sioux, Iowa. Saw-mill head-block	Mar. 5, 1878	117	39	13	433
206, 359	Scofield, Levi T., Cleveland, Ohio. Pipe-joint	Jan. 8, 1878	393	117	13	78
208, 639	Scofield, Walter P., Chattanooga, Tenn. Nut-lock	July 23, 1878	1026	293	14	150
199, 749	Scollay, William A., San Francisco, Cal. Pencil-clasp	Oct. 1, 1878	187	54	14	514
200, 941	Scopes, Edward, assignor to Nelson Lyon, Albany, N. Y. Tool for cutting lines in the sole-edges of boots and shoes	Jan. 29, 1878	1086	318	13	201
200, 412	Scott, Adam and Robert, and Charles A. Skene, Wamego, Kans. Sheep-washer	Mar. 5, 1878	118		13	433
206, 978	Scott, Charles M., Saint Louis, Mo. Artificial dam or dike	Feb. 19, 1878	541	160	13	332
199, 109	Scott, Daniel, Brooklyn, N. Y. Chimney or ventilator cap or cowl	Aug. 13, 1878	338	104	14	251
204, 620	Scott, Henry C., Chicago, Ill. Lamp-burner	Jan. 8, 1878	394	118	13	78
204, 621	Same. Lamp-wick	June 4, 1878	200	64	13	1040
209, 296 8, 355	Scott, John C. (See Moore & Scott.) Scott, John H. jr. (See Freeman, Albert A., assignor.) Scott, Mack, Sidney, Ill. Draft-equalizer	Oct. 22, 1878	926	270	14	629
202, 966	Scott, Nelson T., Westville, Conn., assignor to Frederick C. Tomlinson. Advertising apparatus. (Reissue)	July 30, 1878	1364	392	14	197
211, 059	Scott, Nelson T., Westville, Conn. Advertising apparatus	Apr. 30, 1878	1217	352	13	781
210, 436	Scott, Robert. (See Scott & Skene.) Scott, T. Seymour, assignor of one-half interest to J. P. Onderdonk, Philadelphia, Pa. Paper-winding shaft	Dec. 17, 1878	776	212	14	939
204, 100	Scott, William M., Birmingham, and Thomas Baker, Aston, England. Breech-loading gun	Dec. 3, 1878	47	11, 12	14	830
204, 686	Scoville, Alburton J. L. (See Mathews & Scoville.) Scoville Manufacturing Company. (See Spruce, James, assignor.) Scranton, Worthington, assignor to Joseph Parker, New Haven, Conn. Machine for finishing paper felt and other fabrics.	May 21, 1878	935	267	13	956
206, 902	Scrawner, Sidney. (See Bender, Samuel, assignor.) Scribner, Benjamin, jr., et al. (See Glazier, George W., assignor.) Scribner, Edward E. (See Crittenden, Mason Hatfield, assignor.) Scribner, James F., assignor of one-third interest to Daniel R. Kelly, Philadelphia, Pa. Spike-extractor	Aug. 13, 1878	272	82	14	243
204, 349	Scripture, Eliphalet S., assignor to self, W. H. Harway, and Mary W. Hendrickson, Brooklyn, N. Y. Organ-blower	Feb. 12, 1878	470	139	13	313
204, 686	Scutt, Hiram B., and Horace S. Smith, Joliet, Ill. Machine for making wire cable	June 11, 1878	270	84	13	1054
205, 000	Scutt, Hiram B., Joliet, Ill. Bars for wire fences	June 18, 1878	624	183	13	1161
206, 623	Same. Machine for making barbed ropes for wire fences	July 30, 1878	1321	380	14	191
202, 968	Seabury, Samuel, New York, N. Y. Ventilator	Apr. 30, 1878	1219	352	13	781
209, 195	Seachrist, William, assignor of two-thirds interest to J. C. Mack and M. Durner, Erie, Pa. Churn	Oct. 22, 1878	831	240	14	616
201, 634	Seager, Samuel A. (See Cowles, Walcott, assignor.) Seal, William D. (See Harvey & Seal.) Seal, William D., assignor of one-half interest to George W. Harvey, Washington, D. C. Faucet	Mar. 26, 1878	866	263	13	558
199, 110	Seaman, John A., Chicago, Ill. Street pavement	Jan. 8, 1878	395	118	13	78
203, 654	Same. Stave-jointing machine	May 14, 1878	449	128, 129	13	889
209, 588	Seaman, Joseph S., Pittsburg, Pa. Machine for edging, sizing, and straightening non-cylindrical metal bars	Nov. 5, 1878	51	15	14	688
203, 379	Seaman, William H., Washington, D. C. Metallic retort	May 7, 1878	151	43	13	841
200, 769	Seamans, Charles Olney, Chesterfield, Ind. Potato-digger	Feb. 26, 1878	917	270	13	397
201, 454	Seamans, Oscar B., Velorus A. Bryant, and Hugh Devling, Coalville, Iowa. Corn-planter	Mar. 19, 1878	665	202, 203	13	526
208, 042	Search, Casper F., Chicago, Ill., assignor to Chicago Malleable Iron Company. Clevis	Sept. 17, 1878	506	150, 151	14	421
200, 152	Searle, Henry Winsor, Hamilton, Ontario, Canada. Snow-shovel	Feb. 12, 1878	269	80	13	283
206, 268	Searle, Joseph Miner, and Gideon G. Palmer, Stanhope, N. J. Rotary exhaust cylinder and balanced slide-valve for steam-engines	July 23, 1878	914	260	14	137
200, 671	Searls, Anson, Newark, N. J. Whip-socket	Feb. 26, 1878	820	241	13	363
202, 967	Same. same	Apr. 30, 1878	1218	352	13	781
202, 058	Sears, Elijah C., Clinton, Iowa. Wire-fence tightener	Apr. 2, 1878	197	57	13	627
206, 838	Sears, Thomas F., Battenville, assignor of one-half interest to George Tefft, Salem, N. Y. Oscillating-piston engine	Aug. 6, 1878	177	56	14	228
208, 339 8, 482	Seaver, Augustus, Milford, Mass. Stay for boots and shoes Seaver, George A., New York, N. Y., assignor, by mesne assignments, to R. W. Rayne. Cotton-bale tie. (Reissue)	Sept. 24, 1878	832	243	14	467
203, 380	Seavers, Henry C., et al. (See Stevens, John L., assignor.) Sebastian, Jacob, New York, N. Y. Draft-equalizer	Nov. 12, 1878	450	137	14	745
198, 905	Sechler, Jacob D., Hometown, Ind. Milk-strainer	May 7, 1878	151	43	13	841
200, 224	Sedgwick, Charles, New York, N. Y. Bottle-stopper fastener	Jan. 1, 1878	190	53, 54	13	38
202, 059	Sedgwick, Charles, New York, N. Y., assignor to Henry W. Putnam, Bennington, Vt. Bottle-stopper	Feb. 12, 1878	338	101	13	293
208, 406	See, James W., Hamilton, Ohio. Lathe-carriage	Apr. 2, 1878	197	58	13	627
202, 124	Seber, Horatio G., Brooklyn, N. Y. Apparatus for drying grain	Oct. 1, 1878	41	13	14	494
204, 382	Seckley & Solley. (See Woolley, Edwin, assignor.) Seely, Obadiah, Syracuse, N. Y. Door-spring	Apr. 9, 1878	285	84	13	644
207, 311 8, 144	Seely, Thomas. (See McCollum & Seely.) Seibel, Philip, jr., Saint Louis, Mo. Bottle-washer	May 28, 1878	1249	356	13	1001
206, 834	Seiberling, John F., Akron, Ohio. Harvester. (Reissue)	Aug. 20, 1878	688	205	14	300
208, 931	Same. Grain-binder	Mar. 26, 1878	1109	335	13	593
208, 932	Seibert, Nicholas, San Francisco, Cal. Steam-cylinder lubricator	Aug. 6, 1878	178	57	14	228
201, 456	Same. Lubricator	Oct. 15, 1878	526	154	14	570
202, 591	Seigrist, August, Buffalo, N. Y. Rotary steam-engine	Oct. 15, 1878	526	154	14	571
205, 146	Seilliere, Raymond, and Louis Marie Théophile Rhot, Paris, France. Application of superheated steam to steam-engines	Mar. 19, 1878	666	203	13	526
210, 810	Seitz, Earl M., Philadelphia, Pa. Photographic-printing frame	Apr. 16, 1878	792	229	13	715
	Selby, Almira, Baltimore, Md. Stocking	June 18, 1878	773	228	13	1121
	Selby, John. (See Hill, Charles G., assignor.)	Dec. 10, 1878	461	129	14	822

*Alphabetical list of patentees for the year 1878—Continued.*

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	Selby, John W. ( <i>See</i> Antunes, Jose Antonio, assignor.)					
	Selden, George. ( <i>See</i> Keep, James M., assignor.)					
	Same. ( <i>See</i> Tyler, Chandler & Standish, assignors)..... (Reissue.)					
206, 835	Selden, George, Erie, Pa. Cigar-lighter	Aug. 6, 1878	181	57	14	229
203, 949	Selden, George B., Rochester, N. Y. Hoop-machine.	May 21, 1878	775	222	13	938
202, 477	Self Acting Cow Milking Manufacturing Company. ( <i>See</i> George, William F., assignor.)					
198, 955	Selfridge, Thomas O., United States Navy, Washington, D. C. Wood-boring machine	Apr. 16, 1878	660	103	13	700
201, 129	Selleck, Robert M., assignor to H. F. Osborne, Newark, N. J. Saddle and pad screw cutter	Jan. 8, 1878	245	70	13	53
207, 449	Selleck, David N., Newburg, N. Y. Folding rocking-chair	Mar. 12, 1878	315	96	13	409
204, 169	Sellers, Benjamin F., Garden Prairie, Ill. Barb-winder	Aug. 27, 1878	849	251	14	325
208, 125	Sellers, William, assignor to Charles Emerson & Sons, Haverhill, Mass. Combined pencil-sharpener and eraser	May 28, 1878	1020	293	13	973
208, 425	Sellers, William, Haverhill, Mass. Dredge-bottle	Sept. 17, 1878	588	174	14	433
	Sellers, William, and J. Sellers Bancroft, Philadelphia, Pa., said Bancroft assignor to said Sellers. Injector	Sept. 24, 1878	921	270	14	478
208, 340	Sellick, Wellington W., and John Young, Hastings, Nebr. Washing-machine	Sept. 24, 1878	833	243	14	467
207, 987	Selling, Louis, assignor to Jacob B. Sinn, Detroit, Mich. Cover for pitchers, &c	Sept. 10, 1878	423	130	14	407
200, 350	Sellon, Charles A., New Hudson, N. Y. Steam-pump governor	Feb. 12, 1878	472	139	13	314
204, 622	Sellon, John Allen, Belfast, N. Y. Hay-tedder	June 4, 1878	201	64	13	1041
205, 913	Selsor, Absalom, Athens, Tenn. Railway-gate	July 9, 1878	501	142	14	76
	Selsor, George W. ( <i>See</i> Stamour, John B., assignor.)					
206, 491	Selvey, William, Springfield, Mass. Water-power closet-ventilator	July 30, 1878	1188	341	14	175
	Semel, George A. ( <i>See</i> Salomon, Knoch & Semel.)					
205, 979	Semonin, Paul F., Louisville, Ky. Steam-boiler	July 16, 1878	584	107	14	92
8, 521	Semple, Edward, Chicago, Ill., assignor to John J. Cowell, Newark, N. J. Trunk. (Reissue)	Dec. 10, 1878	486	136	14	896
208, 542	Semple, Robert S., Cincinnati, Ohio. Car-wheel	Oct. 1, 1878	86	25	14	500
203, 202	Semple, Robert William, assignor of one-half interest to George A. Shaw, Toronto, Ontario, Canada. Door	Apr. 30, 1878	1455	425	13	812
199, 230	Senat, Prosper L., Philadelphia, Pa. Center-board for vessels	Jan. 15, 1878	531	156	13	99
	Seneff, Albert. ( <i>See</i> Hoefler & Seneff.)					
203, 078	Seneff, Albert, and Albert Hoefler, Pottsville, Pa., said Seneff assignor to said Hoefler. Vegetable-cutter	Apr. 30, 1878	1322	384 } 385 }	13	795
199, 320	Seng, Wendelin, Chicago, Ill. Folding leg for sofa-bedsteads	Jan. 15, 1878	624	181	13	113
207, 135	Seng, Wendelin, Chicago, assignor to Franz Raci, Lake View, Ill. Rocking-chair	Aug. 20, 1878	510	154	14	277
205, 147	Senn, John, Evansville, Ill. Hog-cholera compound	June 18, 1878	773		13	1121
204, 623	Sennett, Abner J., Louisville, Ky., assignor to Bridgeford & Co. Stove-cover	June 4, 1878	201	64	13	1641
200, 473	Senour, Faunt Le Roy, Pittsburg, Pa. Globe for street-lamps	Feb. 19, 1878	603	177	13	342
202, 196	Senour, William F., Marshall, Mo. Corn planter attachment	Apr. 9, 1878	362	106	13	654
210, 567	Sergeant, Benjamin E., Greensborough, N. C. Saw-mill head-block	Dec. 3, 1878	105	32	14	848
199, 472	Sergeant, Henry Clark, New York, N. Y. Brick-machine	Jan. 22, 1878	780	229	13	146
202, 060	Same. Rock-drill	Apr. 2, 1878	198	58	13	627
201, 053	Sergeant, Wells Ely, Minneapolis, Minn. Millstone-driver	Mar. 5, 1878	233	74	13	451
202, 125	Serrell, Edward W., jr., Castleton, N. Y. Electrical regulator for reeling silk from cocoons	Apr. 9, 1878	286	84	13	644
210, 811	Serrell, Edward W., Castleton, N. Y. Armor for vessels	Dec. 10, 1878	461	129	14	892
	Serrell, Lemuel W., trustee. ( <i>See</i> Strong, Myron H., assignor.)					
205, 914	Servis, David, assignor of one-half interest to Charles F. Sturtevant, New York, N. Y. Railway-spoke	July 9, 1878	501	142	14	76
203, 655	Sessions, Asa, assignor to Winchester Repeating Arms Company, New Haven, Conn. Cartridge-trimming machine	May 14, 1878	450	129	13	889
203, 856	Setchell, George C., Norwich, Conn. Engraving-block	May 21, 1878	674	191	13	924
203, 783	Setterberg, William, Brooklyn, N. Y. Locking-latch	May 14, 1878	588	164	13	906
	Severance, C. F. ( <i>See</i> Severance, James F., assignor.)					
201, 561	Severance, James F., assignor to C. F. Severance, Brockton, Mass. Sash-holder	Apr. 16, 1878	567	166	13	687
201, 561	Sevey, William S. E., and Philip C. Manz, New Orleans, La. Bale-band tightener	Mar. 19, 1878	573	176	13	513
206, 836	Sevall, Samuel, jr., Lowell, Mass. Animal-trap	Aug. 6, 1878	183	58	14	229
204, 624	Seward, Marion F., assignor of one-third interest to Leonard H. Cherry, Bandera, Tex. Lock-faucet	June 4, 1878	202	65	13	1041
	Sewell, Barton, et al. ( <i>See</i> Ewart, William D., assignor.)					
203, 650	Sexton, Charles, Janesville, Wis. Wheel-cultivator	May 14, 1878	452	129	13	889
201, 054	Sexton, Samuel B., Baltimore, Md. Hot-air deflector and evaporator	Mar. 5, 1878	235	74	13	451
	Sexton, William. ( <i>See</i> Herrmann & Sexton.)					
201, 953	Seybold, F. J. ( <i>See</i> Downing, Burton J., assignor.)					
201, 954	Seybold, Frederick J., Saint Louis, Mo. Bottle-stopper	Apr. 2, 1878	88	25	13	612
205, 216	Seybold, Frederick J., Chicago, Ill. Bottle-stopper fastener	Apr. 2, 1878	90	26	13	612
206, 269	Seybold, Frederick J., Saint Louis, Mo. Apparatus for raising water	June 25, 1878	855	254	13	1137
206, 270	Same. Bottle-stopper	July 23, 1878	915	260	14	137
	Same. same	July 23, 1878	918	260	14	137
206, 271	Seybold, Frederick J., Chicago, Ill. Stopper and stopper-fastener	July 23, 1878	919	260 } 261 }	14	138
206, 492	Seybold, Frederick J., Saint Louis, Mo. Bottle-stopper and stopper-fastener	July 30, 1878	1190	342	14	175
206, 493	Same. same	July 30, 1878	1191	342	14	175
208, 043	Same. Bottle-stopper	Sept. 17, 1878	508	151	14	422
203, 667	Seyfang, George, assignor to George N. Pierce, Buffalo, N. Y. Bird-cage	May 14, 1878	453	130	13	890
	Seyfert, McManus & Co. ( <i>See</i> Steen, John G., assignor.)					
199, 321	Seymer, Carl, assignor to Richard Horstmann, Berlin, Germany. Billiard-cue	Jan. 15, 1878	625	182	13	113
199, 475	Seymour, Frederick J., Wolcottville, Conn. Separating molten metals	Jan. 22, 1878	784	230	13	146
	Seymour, Fred. H. ( <i>See</i> Hart, William W., assignor.)					
208, 640	Seymour, John F., New York, N. Y. Stamp-gunning apparatus	Oct. 1, 1878	187	54	14	514
210, 472	Same. Stamp-drying machine	Dec. 3, 1878	86	21	14	835
	Seymour Manufacturing Company. ( <i>See</i> Hewitt, Manlius, assignor.)					
	Same. ( <i>See</i> Simpson, John, assignor.)					
205, 811	Seymour, Marvin J., Oil City, Pa. Drilling and pumping oil-wells by compressed air and petroleum gas	July 9, 1878	393	113	14	62
	Seymour, Mason S., et al. ( <i>See</i> Hicks, Alonzo, assignor.)					
	Seymour, Miles M. ( <i>See</i> Longyear & Clark, assignors.)					
	Seymour, Theron. ( <i>See</i> Gordon, Samuel J., assignor.)					
209, 927	Shackell, Henry. ( <i>See</i> Davis, Adolphus, assignor.)					
	Shackleton, James, and Joseph P. Binns, Halifax, assignors to said Binns, Abraham Akeroyd, Bradford, England, A. K. P. Joy, Winchester, and Henry Binns, Lowell, Mass. Machine for tying in warps	Nov. 12, 1878	422 } 423 } 429 }	127 } 128 } 129 }	14	711
208, 641	Shackleton, Joseph, Rahway, N. J. Manufacturing illuminating-gas	Oct. 1, 1878	188	54	14	514
210, 155	Shaffer, James D., Shelbyville, Ky. Garden tool	Nov. 19, 1878	683	203	14	780

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207, 212	Shaffer, William T., assignor of one-half interest to Arthur Gibson, Fremont, Nebr. Paper-cutting machine	Aug. 20, 1878	588	176	14	287
205, 915	Shahan, Thomas H., Boston, Mass. Candlestick	July 9, 1878	503	143	14	76
208, 205	Shahan, Thomas H., Boston, Mass. Bottle-stopper fastener	Sept. 17, 1878	675	198	14	444
208, 206	Same	Sept. 17, 1878	676	198	14	444
209, 297	Same	Oct. 22, 1878	927	270	14	629
108, 857	Shaler, Henry L., Deep River, Conn. Auger	Jan. 1, 1878	136	39	13	80
202, 061	Same	Apr. 2, 1878	200	58	13	627
202, 761	Shamberger, Daniel, and John Carroll, Beckleysville, Md. Garlic-separator	Apr. 23, 1878	989	284	13	748
	Shane, Elizabeth. (See Shane & Hooker.)					
202, 609	Shane, Joseph and Elizabeth, Pocatonia, and George W. Hooker, Seward, Ill. Fluting device	Apr. 23, 1878	806	257	13	736
205, 916	Shanks, Thomas, Baltimore, Md. Belt-tightener	July 9, 1878	504	143	14	76
	Shannon, Thomas. (See Overshiner & Shannon.)					
206, 680	Shannon, William P., Chicago, Ill. Shuttlecock	Aug. 6, 1878	36	10	14	211
208, 642	Shanton, James T., assignor of one-half interest to Robert L. Downton, Saint Louis, Mo. Treating bran	Oct. 1, 1878	189	54	14	514
	Shantz, Enos S., et al. (See Quigg, Lewis, assignor.)					
207, 213	Share, Loring G., assignor of one-half interest to S. B. Brooks, Corry, Pa. Fifth-wheel	Aug. 20, 1878	589	177	14	287
	Sharer, George. (See Warner, James B., assignor.)					
211, 060	Sharer, Thomas, London, England. Street-car	Dec. 17, 1878	776	213	14	939
202, 478	Sharood, Charles K., assignor to self and Hazen S. Pingree, Detroit, Mich. Channeling-tool for boots and shoes	Apr. 10, 1878	661	193	13	701
	Sharp, Charles M. (See Sharp, Dennis P., assignor.)					
200, 028	Sharp, Dennis P., assignor to Charles M. Sharp, Ithaca, N. Y. Horse hay-rake	Nov. 12, 1878	427	129	14	742
209, 718	Sharp, George A., Harmony, Ky. Corn-planter	Nov. 5, 1878	196	58	14	707
206, 827	Sharp, John C., Evansville, Wis. Stump-extractor	Aug. 6, 1878	183	58, 50	14	229
	Sharps Rifle Company. (See Borchardt, Hugo, assignor.)					
202, 592	Shaw, A. B., Medford, Mass. Curtain-roller and bracket	Apr. 16, 1878	795	229	13	715
200, 225	Shaw, Benjamin F., Cambridge, Mass. Knitting stockings	Feb. 12, 1878	839	102	13	294
199, 865	Shaw, Charles, Bridgeport, Conn. Steam-boiler	Jan. 29, 1878	1196	351	13	218
	Shaw, Charles A. (See Palmer & Shaw.)					
202, 670	Shaw, David, and David Spence, Pittsburg, Pa. Wire-rolling machine	Apr. 23, 1878	897	257	13	736
	Shaw, David E. (See Brigham & Shaw.)					
	Shaw, Francis R. (See Parsons, Shaw & Daniels.)					
	Shaw, George A. (See Semple, Robert William, assignor.)					
	Shaw, George F. (See Shaw, Henry F. and George F.)					
201, 710	Shaw, George F., Boston, Mass. Curtain-fixture	Mar. 26, 1878	933	286	13	568
210, 812	Shaw, Granville C., Washington, D. C. Horseshoe and pad	Dec. 10, 1878	462	130	14	892
	Shaw, Henry. (See Cook & Shaw.)					
200, 672	Shaw, Henry, Waveland, Miss., and Frederic Cook, New Orleans, La. Bale-tie	Feb. 26, 1878	821	242	13	883
200, 413	Shaw, Henry F. and George F., Boston, Mass. Side-hill plow	Feb. 10, 1878	542	160	13	332
209, 196	Shaw, J. Elliott, Norristown, Pa. Sand-box for street-cars	Oct. 22, 1878	832	240	14	616
8, 268	Shaw, John, Brooklyn, N. Y., assignor to Hill's Archimedian Lawn Mower Company, Hartford, Conn. Lawn-mower	May 28, 1878	1303	871	13	1008
	(Reissue.)					
200, 483	Shaw, John M., Peoria, Ill. Foot-rest	Feb. 10, 1878	612	180	13	343
203, 077	Shaw, John Simpink, Joplin, Mo. Fire-escape	Apr. 30, 1878	1321	384	13	795
198, 818	Shaw, Joseph, Huddersfield, England. Union or joint for pipes	Jan. 1, 1878	98	27	13	23
200, 879	Shaw, Lorenzo D. B., Boston, Mass. Attachment for lamp-chimneys	Mar. 5, 1878	65	23	13	425
205, 307	Shaw, Lorenzo L., Yarmouth, Me. Warping-machine	June 25, 1878	954	282	13	1150
	Shaw, Nathaniel H. (See Shaw, Winthrop D. and Nathaniel H.)					
207, 627	Shaw, Philander, Boston, Mass. Locking, sealing, and labeling milk-cans	Sept. 3, 1878	42	14	14	354
207, 822	Same	Sept. 10, 1878	253	79	14	384
	Shaw, Samuel A. (See Tappan & Shaw.)					
205, 001	Shaw, Thomas, Orange, N. J. Manufacture of forks	June 18, 1878	625	183	13	1101
200, 094	Shaw, William T., and George W. Menz, Louisville, Ky. Steaming-table and heating-oven combined	Feb. 5, 1878	205	64	13	265
209, 107	Shaw, Winthrop D., Ashland, N. H., and Nathaniel H. Shaw, Bedford, Quebec, Canada. Wood-grinding machine for paper-pulp	Oct. 22, 1878	833	241	14	616
200, 000	Shear, Mortimer, and James McClung Hamilton, Nashville, Tenn. Carbureters	Feb. 5, 1878	106	35	13	250
210, 568	Shearer, Benson H., Rushford, N. Y. Vehicle-pole	Dec. 3, 1878	196	52	14	848
202, 287	Shedd, J. Herbert, Providence, R. I. Trap for house-drains and waste pipes	Apr. 9, 1878	454	133	13	667
210, 714	Sheeder, J. Frederick, Kimberton, Pa. Manufacture of paper-board	Dec. 10, 1878	357	98	14	878
204, 393	Sheeley, Frederick A., Prairie City, Ill. Coupling air and steam brake pipes on cars	May 28, 1878	1251	356	13	1002
205, 003	Sheetz, James William, Woodstock, Va. Combined washer and wringer	June 18, 1878	627	184	13	1102
207, 076	Sheffer, Uriah S. and William H., York, Pa. Turbine wheel and gate-operating mechanism	Aug. 13, 1878	433	134	14	263
	Sheffer, William H. (See Sheffer, Uriah S. and William H.)					
8, 477	Shedfield, George V., Northbridge, Mass., assignor, by means assignments, to Ruth A. Cook. Heel-stiffener for boots and shoes	Nov. 5, 1878	230	69	14	712
	(Reissue.)					
198, 819	Shelabarger, Benjamin F., Hannibal, Mo. Car-wheel and lubricator	Jan. 1, 1878	98	27	13	23
205, 308	Sheldon, Albert C., and Edwin B. Pope, Saint Louis, Mo., assignor of one-half interest to Edward P. McCarty and E. M. Powers. Lamp-reflector	June 25, 1878	955	283	13	1150
208, 933	Sheldon, Albert C., Saint Louis, Mo. Passenger-ticket	Oct. 15, 1878	527	154	14	571
205, 002	Sheldon, Cevadra B., New York, N. Y. Invalid-chair	June 18, 1878	626	184	13	1102
201, 455	Sheldon, Cornelia A., Amity, N. Y. Fire-escape	Mar. 19, 1878	666	203	13	526
203, 560	Sheldon, Frank P., Providence, R. I. Machine for threading screws	May 14, 1878	363	102	13	878
209, 298	Sheldon, George T., Chelmsford, Mass. Machine for unhairing and scouring hides and skins	Oct. 22, 1878	928	270, 271	14	629
	Sheldon, John M. (See Cummings, Matthew L., assignor.)					
207, 214	Sheldon, Sylvester W., New York, N. Y. Barrel-cover	Aug. 20, 1878	590	177	14	287
201, 560	Shellabarger, Flavius W., Miami County, Ohio. Windmill	Mar. 19, 1878	772	235, 236	13	546
201, 955	Shellcnback, Peter, assignor of one-half interest to William E. Drayer, Hamilton, Ohio. Combination-lock	Apr. 2, 1878	90	26	13	612
207, 823	Shellhouse, Edward S., Carey, Ohio. Gate-latch	Sept. 10, 1878	254	79	14	384
209, 778	Shelly, Christopher C., New York, N. Y. Stocking supporter and clasp	Nov. 12, 1878	270	80	14	721
210, 639	Shelton, Ezekiel, Alliance, Ohio. Railway-crossing	Dec. 10, 1878	282	77, 78	14	889
207, 988	Shelton, Gilliam, Normal, Ill. Fruit-picker	Sept. 10, 1878	435	131	14	407
203, 204	Shepard, Amos, Plantsville, assignor to Peck, Stow & Wilcox Company, Southington, Conn. Coffee-mill	Apr. 30, 1878	1456	426	13	812
206, 141	Same	July 16, 1878	753	217	14	112
	Shepard, Charles G., et al. (See Adams, Peter, Jr., assignor.)					
200, 575	Shepard, Charles G., and Peter Adams, Jr., Buffalo, N. Y. Cooking utensil	Feb. 10, 1878	702	206	13	357

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209, 930	Shepard, Charles G., and Peter Adams, jr., assignors to said Shepard and Walter J. Shepard, Buffalo, N. Y. Fluting-machine.	Nov. 12, 1878	429	129	14	742
211, 061	Same. . . . . same	Dec. 17, 1878	778	213	14	939
201, 956	Shepard, Edson E., Buffalo, N. Y. Sash-holder.	Apr. 2, 1878	91	26	13	612
199, 666	Shepard, Freedom G., Battle Creek, Mich. Straw-elevator for grain-separator.	Jan. 29, 1878	1011	294	13	190
209, 100	Shepard, George A. (See White, Charles Henry, assignor.)					
207, 989	Shepard, George B., Ogdensburg, N. Y. Machine for twining wreaths.	Oct. 15, 1878	714	207	14	595
	Shepard, Henry W., Brooklyn, N. Y. Metallic shingle.	Sept. 10, 1878	435	131	14	407
204, 170	Shepard, Joseph A. (See Borneman & Sharp.)					
	Shepard, Morrill A., Lebanon, Ill. Draft-pipe for heaters	May 28, 1878	1029	293	13	974
	Shepard, Sidney, et al. (See Tripp, Augustus F., assignor.)					
	Shepard, Walter J., et al. (See Adams, Peter, jr., assignor.)					
209, 929	Shepard, Walter J. (See Shepard & Adams, assignors.)					
199, 473	Shepard, William, Jonesburg, Mo. Hand corn-planter	Nov. 12, 1878	428	129	14	742
	Shepard, Thomas N., assignor of one-half interest to Warren Fuller, Lincoln, Nebr. Windmill	Jan. 22, 1878	783	230	13	146
205, 582	Shepherd, Charles C., Passaic, N. J. Slate.	July 2, 1878	125	37	14	25
200, 484	Shepherd, Francis H., Davenport, Iowa. Vapor-burner	Feb. 19, 1878	612	180	13	343
207, 136	Same. . . . . Street-lamp.	Aug. 20, 1878	510	154	14	277
	Shepherd, John. (See Moores & Shepherd.)					
207, 556	Shepherd, Reuben, New York, N. Y. Canopy for beds.	Aug. 27, 1878	964	283	14	339
	Shepherd, Samuel. (See Harris & Shepherd.)					
203, 203	Shepherd, William Simpson, Leeds, England. Machine for cutting out and removing seams.	Apr. 30, 1878	1456	425	13	812
	Sheppard, John L. (See Glover, Wilson, assignor.)					
207, 901	Sheppard, John L., Charleston, S. C. Bale-tie buckle.	Sept. 10, 1878	343	104	14	395
207, 902	Same. . . . . Bale-band tightener and band.	Sept. 10, 1878	344	105	14	396
209, 363	Same. . . . . Bale-band tightener.	Oct. 29, 1878	1006	293	14	044
	Sheppard, W. B. (See Tittle, Christopher C., assignor.)					
207, 687	Sheppard, William H., New York, N. Y. Extension-slide for gas-fixtures.	Sept. 3, 1878	102	31	14	362
	Sherbondy, Devane F., et al. (See Boote & Hechler, assignors.)					
	Sherburne, N. H. (See Underwood, Amos H.)					
199, 939	Sherburne, William J., Hastings, Minn. Machine for sawing shingles	Feb. 5, 1878	51	16, 17	13	241
201, 635	Sherck, Isaac, Fremont, assignor to self and Isaac, Edward, and William H. Kern, Bellevue, Ohio. Turbine water-wheel.	Mar. 26, 1878	867	264	13	558
8, 205	Sheridan, Edwin R. and Theodore W., Brooklyn, N. Y. Machine for cutting paper. (Reissue.)	Apr. 30, 1878	1489	436	13	816
	Sheridan Horse Nail Company. (See Hutchinson & Armstrong, assignors.)					
	Sheridan, James. (See Koerber, Alexander R., assignor.)					
	Sheridan, Theodore W. (See Sheridan, Edwin R. and Theodore W.) (Reissue.)					
200, 576	Sherman, Albert R., Natick, R. I. Book-rack	Feb. 19, 1878	703	206	13	357
203, 080	Same. . . . . same	Apr. 30, 1878	1324	385	13	795
205, 217	Sherman, Albert R., Natick, assignor to Stephen A. Jenks, Lincoln, R. I. Gate-operating mechanism.	June 25, 1878	857	254	13	1138
206, 046	Same. . . . . Barrier for draw-bridges	July 16, 1878	648	188	14	100
209, 197	Sherman, Benjamin M., assignor of one-half interest to Thomas Van S. Rogers, Flint, Mich. Lifting-jack	Apr. 9, 1878	363	106	13	654
	Sherman, Frederick M. (See Lamb, Amos A., assignor.)					
	Sherman, George H. (See Schade & Lockwood, assignors.)					
	Sherman, Israel A. (See Mees & Sherman.)					
	Sherman, Jeremiah G. (See Sherman, Samuel S. and Jeremiah G.)					
	Sherman, John, et al. (See Wolbrecht, John M., assignor.)					
	Sherman, Mason W. (See Tatro, Charles T., assignor.)					
199, 322	Sherman, Samuel S. and Jeremiah G., McHenry, Ill. Farm-gate	Jan. 15, 1878	626	182	13	113
199, 231	Sherman, William F., Lowell, Mass. Vessel for holding liquids.	Jan. 15, 1878	532	156	13	99
207, 137	Sherrick, Benjamin F., Elida, Ohio. Ditching-machine	Aug. 20, 1878	511	154	14	277
	Sherriff, James A. (See Law, Abram H., assignor.)					
208, 044	Sherriffs, William E., Boston, Mass. Combined overflow and outlet connection for bowls, &c.	Sept. 17, 1878	509	151	14	422
210, 569	Sherrill, James, Harrisburg, Oreg. Gang cultivator and seeder	Dec. 3, 1878	197	52	14	849
204, 849	Sherwin, George Ernest, Hackney, England. Crushing and pulverizing machine.	June 11, 1878	448	131	13	1075
202, 594	Sherwood, Horace H., Fredericktown, Ohio. Fence-post.	Apr. 16, 1878	797	229	13	715
203, 561	Sherwood, Isaac Q., Bay City, Mich. Step-ladder	May 14, 1878	365	103	13	878
	Sherwood, I. W. (See Ewing, John Albert, assignor.)					
204, 848	Sherwood, Norman B., Saratoga Springs, N. Y., assignor of one-half interest to George H. Rice, Worcester, Mass. Car-seat and couch	June 11, 1878	447	131	13	1075
	Sherwood, Stephen E. (See Cooley, Oliver & Sherwood.)					
	Shethar, Samuel, et al. (See Gouge, Henry A., assignor.)					
202, 593	Shew, Jacob, Baltimore County, Md. Hand corn-planter	Apr. 16, 1878	796	229	13	715
206, 838	Shibley, Charles W., and Ezra P. Wright, Springfield, Ohio. Circular sawing machine	Aug. 6, 1878	186	59	14	229
209, 139	Shickle, Frederick, assignor of two-thirds interest to Thomas Howard and John W. Harrison, Saint Louis, Mo. Pipe-molding machine	Oct. 22, 1878	775	225	14	608
209, 428	Same. . . . . same	Oct. 29, 1878	1073	311	14	653
200, 770	Shields, David, Florence, Mass., and Robert Z. Liddle, Albany, N. Y. Oil-stove.	Feb. 26, 1878	918	270	13	397
	Shields, John J. (See Jackson, Benjamin F., assignor.)					
	Shillito, John. (See Phelps, Ira M., assignor.)					
	Shimer, George J. (See Shimer, Samuel J. and George J.)					
206, 360	Shimer, Samuel J. and George J., Milton, Pa. Variety molding machine	July 23, 1878	1026	294 } 295	14	151
201, 204	Shine, Joseph Alexander, Mount Olive, N. C. Cotton-planter and fertilizer-distributor.	Mar. 12, 1878	383	119	13	480
201, 055	Shinkle, Florimond L., and David F. Stambaugh, Casey, Ill. Sash-balance	Mar. 5, 1878	235	74	13	451
209, 989	Shinn, James S., Atlantic City, N. J. Cartridge-extractor	Nov. 19, 1878	502	152	14	755
203, 784	Shinn, Joseph A., Newcastle, Pa. Promoting traction in locomotives.	May 14, 1878	589	165	13	906
	Shinn, Joseph H., et al. (See Young, Frederick, assignor.)					
203, 658	Shipherd, William C., Cleveland, Ohio. Bolt.	May 14, 1878	454	130	13	890
8, 436	Shiras, David R., Sharon, Pa. Cooling apparatus for stand-pipes of gas-retorts. (Reissue.)	Sept. 24, 1878	967	282	14	484
202, 381	Shirk, David B., Brunersville, Pa. Cellar-grating	Apr. 16, 1878	568	166	13	687
204, 508	Shirk, William Snider, Anderson, Ind. Actuating mechanism for calendar-clocks.	June 4, 1878	81	28	13	1024
207, 128	Shirley, Edward M., Washington, D. C. Drip-pan for liquid-measure	Aug. 20, 1878	512	155	14	277
208, 543	Same. . . . . Toy	Oct. 1, 1878	87	25	14	500
204, 384	Shirley, Frederick S., New Bedford, Mass. Manufacture of glass from lava.	May 28, 1878	1251	356	13	1002
217, 077	Same. . . . . Producing colors on glass, &c., by fuming with vapors or other gases	Aug. 13, 1878	434	134	14	263



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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Draw.	Vol.	Page.
208, 207	Shirley, Frederick S., New Bedford, Mass. Tempering glass.	Sept. 17, 1878	677	198 199	14	444
201, 292	Shirley, John R., assignor of one-half interest to John A. Hinckle, Philadelphia, Pa. Combined sideboard and dining-table	Mar. 12, 1878	481	147		
205, 690	Shiver, Elisha, Pittsburg, Pa. Spring motor	July 2, 1878	242	72, 73	14	39
204, 687	Shlandeman, Henry, Decatur, Ill. Safety-valve for fermented-liquor casks.	June 11, 1878	272	84	13	1054
200, 988	Shoe Machine Manufacturing Company. (See Fay, Norman H., assignor.) (Reissue.)	Nov. 19, 1878	501	152	14	755
206, 624	Shoemaker, Charles F., Cleveland, Ohio. Vehicle-spring					
199, 998	Shoemaker, David L. (See Kidwell & Maloney, assignors.)					
	Same (See Maloney & Shoemaker.)					
206, 624	Shoemaker, Gilbert Joseph, Albion, Iowa. Fence-post	July 30, 1878	1322	380	14	191
205, 429	Shoemaker, John W., and Samuel Dodsworth, Leavenworth, Kans. Temporary binder	Feb. 5, 1878	105	34	13	249
	Shoemaker, William B., Newville, Pa. Bee-hive	June 25, 1878	1078	319	13	1166
	Shoenberger & Co. (See Justus & Young, assignors.)					
	Shoeninger, Adolph. (See Betz, Eugen, assignor.)					
	Same (See Unzicker, Otto, assignor.)					
204, 385	Shoeninger, Adolph, Chicago, Ill. Reversible handle for children's carriages.	May 28, 1878	1252	357	13	1002
	Shoff, Robert. (See Barnes, Thomas, assignor.)					
190, 382	Sholes, C. Latham, Milwaukee, Wis., assignor to Type Writer Company. Type-writing machine	Jan. 22, 1878	605	204	13	132
200, 351	Sholes, C. Latham, and Carlos Glidden, Milwaukee, Wis., assignors, by mesne assignments, to Type Writer Company. Type-writing machine	Feb. 12, 1878	473	139	13	314
207, 557	Sholes, C. Latham, Milwaukee, Wis., assignor to Type Writer Company, New York, N. Y. Type-writing machine	Aug. 27, 1878	965	283	14	339
207, 558	Same	Aug. 27, 1878	966	283	14	339
207, 559	Same	Aug. 27, 1878	967	283 284	14	339
	Sholes, Marion. (See Morse & Sholes.)					
206, 048	Shollar, Frank, assignor of one-half interest to Albert M. Hilton, Otsego Lake, Mich. Pump	July 16, 1878	650	189	14	100
	Shandy, W. H. (See Wood, Charles H., assignor.)					
	Shoninger, B. (See Lomas, John R., assignor.)					
200, 577	Shook, Levi, Pittsburg, Pa. Paddle-wheel	Feb. 19, 1878	704	207	13	357
202, 382	Same	Apr. 16, 1878	560	167	13	687
8, 155	Shoots, James D., assignor of three-fourths interest to Robert Colwell and Stoddard D. Conkling, Horsesheds, and Charles E. Vinton, Elmira, N. Y. Wood-boring machine	Apr. 2, 1878	238	69	13	633
	Shorey, George L. (See Porter, Alonzo W., assignor.)					
	Short, Barney W. (See Moffatt, Willoughby, assignor.)					
8, 032	Shortau, Carl, New York, N. Y., assignor, by mesne assignments, to Washburn & Moen Manufacturing Company. Wire-twisting machine	Jan. 8, 1878	437	128	12	84
207, 777	Shotwell, Reuben H., West Point, Miss. Cotton-cleaning machine	Sept. 3, 1878	195	60	14	374
202, 595	Shotwell, Walter S., San Francisco, Cal. Ore-amalgamator	Apr. 16, 1878	797	230	13	715
210, 640	Shoup, Saxton C., Carey, Ohio. Farm-gate	Dec. 10, 1878	283	78	14	860
201, 711	Showalter, Isaac, Willistown Township, assignor of one-half interest to W. M. Johnson, Trebleffin, Pa. Shovel	Mar. 26, 1878	934	286	13	568
201, 203	Shrader, Jay, Saint Louis, Mo. Animal-trap	Mar. 12, 1878	482	148	13	493
206, 047	Shrake, Frederick T., assignor of one-half interest to A. Beyer, Philadelphia, Pa. Middlings-feeder for millstones	July 16, 1878	650	189	14	100
204, 688	Shreffer, Samuel, Jr., Morris, Ill. Brick-machine	June 11, 1878	273	84, 85	13	1054
207, 078	Same	Aug. 13, 1878	435	134	14	263
204, 767	Shuck, John M., Des Moines, Iowa	June 11, 1878	357	107	13	1065
206, 494	Shultis, Robert H., Kingston, N. Y. Grinding-mill for bark	July 30, 1878	1193	342	14	175
207, 215	Shultz, Samuel B., Princeton, Ill. Washing-machine	Aug. 20, 1878	590	177	14	187
210, 057	Shupe, David D., Philadelphia, Pa. Wardrobe-bedstead	Nov. 19, 1878	576	173	14	765
8, 075	Shute, George S., Boston, Mass. Electric and thermostatic fire-alarm	Feb. 5, 1878	236	72	13	269
207, 139	Same	Aug. 20, 1878	513	155	14	277
200, 372	Shutt, Michael, Kiskiminetas Township, Armstrong County, assignor of one-half interest to Martin P. Kirkland, Apollo, Pa. Post-hole digger	Feb. 12, 1878	474	140	13	314
203, 630	Sibbald, Stephen, Nelsonville, Ohio. Heater	May 14, 1878	456	130	13	890
206, 142	Sibley, Edwin E. (See Callahan, Cornelius, assignor.)					
	Sibley, Frank, and James Holmwood, Jr., Buffalo, N. Y. Combined gum-box and spinning-toy	July 16, 1878	754	217	14	112
205, 507	Sibley, Stephen, Chelsea, Mass. Hose-coupling	July 2, 1878	45	14	14	15
200, 153	Sickles, Justus, Cedar Rapids, Iowa. Fence-post	Feb. 12, 1878	270	80	13	283
208, 045	Siddeley, John, et al. (See Kyle, John, assignor.)					
	Siddeley, John, and Frederick N. Mackay, Liverpool, England. Ether-meter for refrigerating-machines	Sept. 17, 1878	510	152	14	422
206, 626	Siddeley, Joshua, et al. (See Kyle, John, assignor.)					
	Siddeley, Joshua, and Frederick N. Mackay, Liverpool, England. Process and apparatus for making ice	July 30, 1878	1324	381	14	192
206, 627	Same	July 30, 1878	1325	381	14	192
203, 660	Sidlinger, Gorham S., Chelsea, Mass. Anchor	May 14, 1878	456	130	13	890
206, 625	Sidmore, Oscar, Aurora, Ind. Graining	July 30, 1878	1323		14	191
210, 157	Siebenlist, Emil, Berlin, Prussia. Nipple for nursing-bottles	Nov. 19, 1878	684	203	14	780
206, 143	Siebert, Adolph. (See Grossheim, Georg, assignor.)					
	Siedler, Charles, Jersey City, N. J., assignor to P. Lorillard & Co., New York, N. Y. Marking of plug-tobacco	July 16, 1878	755	217	14	112
210, 178	Sieg, Rudolf, New Orleans, La., assignor to William Monefeld Howland, New York, N. Y. Diffusion apparatus	Nov. 19, 1878	685	203	14	780
208, 426	Siegsdörner, Conrad, Butler County, Ohio. Plow-sulky	Sept. 24, 1878	924	270 271	14	478
201, 294	Siemens, Charles W., Westminster, England. Revolving furnace with regenerators	Mar. 12, 1878	483	148 149		
205, 980	Same	July 16, 1878	585	167 168	14	92
8, 399	Siemens, Frederick, Dresden, German Empire. Hardening, tempering, and pressing glass	Sept. 3, 1878	219	67, 68		
8, 400	Same	Sept. 3, 1878	220	68, 69	14	376
190, 583	Same	Jan. 22, 1878	806	263	13	164
205, 981	Same	July 16, 1878	588		14	92
207, 590	Siemroth, Albin, Eichen, Rudolstadt, Germany. Portable parquet flooring	Sept. 10, 1878	436	131	14	408
209, 719	Sirer, Adam L., Mechanicsburg, Pa. Fruit-drier	Nov. 5, 1878	137	58	14	707

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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200, 485	Sievern, Gustav F., assignor to self and Alonzo Walton, Brooklyn, N. Y. Life-boat	Feb. 19, 1878	613	181	13	348
204, 386	Sievers, Jacob H., and Henry T. Winkler, Valparaiso, Ind. Wrench	May 28, 1878	1253	357	13	1002
200, 942	Sievert, Henry, and Frank Johnson Young, Denison, Iowa. Washing-machine	Mar. 5, 1878	119	40	13	432
204, 625	Silabee, John W., Binghamton, N. Y. Mucilage-holder	June 4, 1878	203	65	13	1041
200, 226	Silva, Albert P., Elmira, N. Y. Duster-coat	Feb. 12, 1878	341	102	13	204
	Silver, Ann. (See Silver, William H., assignor.)					
	Silver & Deming Manufacturing Company. (See Fawcett, Edward W., assignor.)					
199, 584	Silver, Edwin, Reading, assignor to John Keats, Wood Green, England. Gage-lathe.	Jan. 22, 1878	898	263	13	164
	Silver, Samuel Norman. (See Chandler & Silver.)					
203, 081	Silver, William H., New York, N. Y., assignor to Ann Silver, Saint Louis, Mo. Dessert-maker	Apr. 30, 1878	1325	385	13	705
202, 596	Silverberg, Marks, New York, N. Y. Insole	Apr. 16, 1878	799	230	13	715
210, 070	Silvester, William, Pittsburg, assignor to Hugh McDonald, Allegheny, Pa. Bale-tie.	Dec. 17, 1878	662	182	14	025
206, 690	Simcox, Abraham, Jackson, Mich. Peg-float	Aug. 6, 1878	37	10	14	211
205, 691	Simis, Theodor, Hamburg, Germany. Venetian blind	July 2, 1878	245	73	14	39
	Simmons, G. W. (See Howard, Thomas S. L., assignor.)					
208, 034	Simmons, Joseph, Coopersville, Mich. Car-coupling	Oct. 15, 1878	528	155	14	571
	Simmons, Lorin B. (See Reed, Luther, assignor.)					
210, 715	Simon, Gottlieb F., Bristol, R. I., assignor to National Rubber Company. Loom-temple for weaving tubular fabrics	Dec. 10, 1878	352	99	14	879
207, 560	Simon, Gottlieb H., Kiel, Wis. Stove-pipe drum	Aug. 27, 1878	970	284	14	340
8, 423	Simon, Gustave. (See Dalton, Joseph, assignor.)					
204, 626	Simon, Gustave, New York, N. Y. Trimming	Sept. 17, 1878	699	205	14	446
210, 570	Same. Machine for shaping dress-trimmings	June 4, 1878	204	65	13	1041
	Same. Machine for shaping dress-trimmings	Dec. 3, 1878	109	53	14	840
	Simon, Henry. (See Fairbairn & Simon.)					
	Simon, Louis T. (See Bostock & Simon.)					
210, 273	Simon, Thomas, assignor to self and Cornelius Roosevelt, Paris, France. Manufacture of bleaching-liquids	Nov. 26, 1878	820	243	14	801
	Simonds, Alfred A. (See Simonds & Marshall.)					
199, 940	Simonds, Alvan A. (See Farmer, Silas Ephraim, assignor.)					
207, 450	Simonds, Alvan A., Dayton, Ohio. Bed-plate for paper or rag engines	Feb. 5, 1878	53	17	13	241
	Simonds, George F., and Daniel and Alfred A. Marshall, Fitchburg, Mass. Circular saw	Aug. 27, 1878	850	251	14	325
201, 457	Simonds, Nathan J., Woburn, Mass. Machine for molding heel-stiffeners for boots and shoes	Mar. 19, 1878	668	204	13	526
	Simonin, Charles F. A. (See Adamson & Simonin.)					
200, 095	Simons, Howard T., Cambridge, Ohio. Basket-grate	Feb. 5, 1878	206	64	13	265
	Simons, Lewis Edward. (See Jeannerat & Simons.)					
201, 561	Simonsen, Jacob A. S., Brooklyn, N. Y. Child's carriage	Mar. 19, 1878	774	236	13	541
203, 661	Same. Railway-car	May 14, 1878	457	131	13	890
203, 082	Simonsen, John H., East Norwich, N. Y. Baling-press	Apr. 30, 1878	1326	386	13	796
	Simonsen, Sale. (See Davis & Simonsen.)					
	Simonton, John W. (See Baker & Simonton.)					
203, 083	Simonton, Robert. (See Adams, Cain & Simonton.)					
	Simpson, Abraham B., Carter's Station, Tenn. Churn	Apr. 30, 1878	1327	386	13	796
	Simpson, C. B. (See Jackson, George Fred., assignor.)					
207, 140	Simpson, C. Wright, and George C. Howard, Philadelphia, Pa. Machine for granulating tobacco	Aug. 20, 1878	514	155	14	277
201, 056	Simpson, Elton B., Bridgewater, Va. Car-seat	Mar. 5, 1878	236	75	13	451
	Simpson, George H., et al. (See Morse, Charles A., assignor.)					
205, 309	Simpson, Greenleaf W., Somerville, Mass. Butter-can	June 25, 1878	956	283	13	1150
	Simpson, James. (See Parnell, Edward W., assignor.)					
204, 689	Simpson, James E., Brooklyn, N. Y. Dry-dock	June 11, 1878	274	85	13	1054
209, 198	Simpson, James P., Cincinnati, Ohio. Carriage-top prop	Oct. 22, 1878	834	241	14	616
210, 716	Simpson, John, Cleveland, Ohio, assignor to Seymour Manufacturing Company, Seymour, Ind. Seythe-snath fastener	Dec. 10, 1878	361	99	14	879
205, 812	Simpson, John T., Meigs Township, Muskingum County, Ohio. Flood-gate	July 9, 1878	305	113	14	63
210, 365	Simpson, Josiah M., Oshkosh, Wis. Automatic boiler-feeder	Nov. 26, 1878	924	270	14	815
	Simpson, Louisa B. (See Simpson & Kimball, assignors.)					
206, 628	Simpson, Louisa B., Lawrence, Kans. Apparatus for destroying vegetation on railways	July 30, 1878	1325	381	14	192
8, 137	Simpson, Robert, assignor, by mesne assignments, to Highland Fountain Company, Boston, Mass. Stove	Mar. 26, 1878	1098	333	13	501
199, 867	Simpson, William A., and Samuel Kimball, said Simpson assignor to Louisa B. Simpson, Lawrence, Kans. Alarm for locomotives to drive cattle from the track	Jan. 29, 1878	1197	351	13	218
209, 290	Simpson, William A., and Samuel Kimball, Lawrence, Kans. Device for driving cattle from railway-tracks	Oct. 22, 1878	929	271	14	029
	Sims, Curtis B., et al. (See Sims, Elijah, assignor.)					
199, 111	Sims, Elijah, assignor to Milton Z., Curtis B., and John A. Sims, Aurora, Ill. Manufacture of metal rakes	Jan. 8, 1878	397	118	13	78
	Sims, John A., et al. (See Sims, Elijah, assignor.)					
	Sims, John M. (See Pope, Sampson, assignor.)					
	Sims, Milton Z., et al. (See Sims, Elijah, assignor.)					
207, 561	Sinclair, James A., Bridgeport, assignor of one-half interest to Abram Lash, Martin's Ferry, Ohio. Double-acting pump	Aug. 27, 1878	972	285	14	340
202, 198	Sinderson, Charles Henry, Chemung, Ill. Middlings-separator	Apr. 9, 1878	363	106	13	654
	Singer, Adolph A. (See Fischer & Singer.)					
	Singer, Benjamin W., et al. (See Roberts, Edward J., assignor.)					
199, 585	Singer, David McDonald, Johnstown, Pa. Combined table and clothes-horse	Jan. 22, 1878	901	263	13	165
202, 702	Singer, Isaac A., New York, N. Y. Waste-pipe for basins	Apr. 23, 1878	990	285	13	748
	Singer Manufacturing Company. (See Diehl, Philip, assignor.)					
	Same. (See Miller & Diehl, assignors.)					
199, 808	Singleton, William, and Edmund Priestman, Sheffield, Great Britain. Pocket or spring knife	Jan. 29, 1878	1198	352	13	218
	Sinn, Jacob B. (See Selling, Louis, assignor.)					
8, 478	Sinn, John L. (See King, Francis, assignor.)					
199, 750	Sinuz, Philip, Baltimore, Md. Mounting glazier's diamonds	Nov. 5, 1878	221	60	14	712
203, 785	Sipe, Archibald, River Bank, Va. Plow	Jan. 29, 1878	1087	310	13	201
	Siprell, Darius W., assignor to self and William H. Morrison, Monongahela City, Pa. Coal-mining auger	May 14, 1878	500	165	13	906
207, 903	Sirois, Arthur, New York, N. Y. Belt-coupling	Sept. 10, 1878	347	105	14	396
202, 597	Sisson, Gilbert, Providence, R. I. Swage for forming jewelers' dies	Apr. 16, 1878	799	230	13	716
201, 957	Sisson, Jacob D., assignor to Sisson & Tucker, Worcester, Mass. Water-closet cock	Apr. 2, 1878	92	26	13	612
	Sisson & Tucker. (See Sisson, Jacob D., assignor.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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208, 857	Sisum, William H. H., assignor to E. R. Esmond, trustee, Brooklyn, N. Y. Car-truck.	Oct. 8, 1878	435	126	14	554
200, 943	Skaaraa, Ole Nielsen, Hale, Wis. Seed-drill.	Mar. 5, 1878	120	40	13	434
	Skene, Charles A. (See Scott & Skene.)					
	Skidmore, George C. (See Birge & Skidmore.)					
208, 497	Skinner, Charles C., assignor to George W. Williams, jr., and Hobert M. Stocking, Eau Claire, Wis. Grading and ditching machine.	Oct. 1, 1878	42	13, 14	14	495
	Skinner, Halcyon. (See Smith & Skinner.)					
202, 671	Skinner, Roswell M., Tontogany, Ohio. Harrow.	Apr. 23, 1878	898	257	13	736
	Slack, William. (See Holliday & Lambert, assignors.)					
	Slade, Charles W. (See Cabot, Samuel, jr., assignor.)					
8, 422	Slade, James, Yonkers, assignor, by mesne assignments, to International Gas Light Company, New York, N. Y. Preventing loss of heat in charging gas-retorts. (Re-issue.)	Sept. 17, 1878	698	205	14	446
206, 144	Slade, James, Yonkers, N. Y. Preventing loss of heat in charging gas-retorts.	July 16, 1878	755	217	14	112
	Slade, Jarvis Morgan. (See Ford, Slade & Baylies.)					
204, 768	Slate, John D., Bernardston, Mass. Breech-loading fire-arm.	June 11, 1878	358	107	13	1065
204, 769	Slater, Benjamin, assignor to self, Isaac O. Williams, and James G. Dorrance, Attica, N. Y. Feather-renovator.	June 11, 1878	359	107	13	1065
202, 672	Slater, John Y., Baltimore, Md. Separating wool and cotton and similar animal and vegetable fibers from fabrics.	Apr. 23, 1878	899	258	13	736
199, 223	Slaughter, Joel C., Crumpton, Md. Fruit-drier.	Jan. 15, 1878	532	157	13	99
210, 571	Slawson, John B., New York, N. Y. Pare-box.	Dec. 3, 1878	200	53	14	849
210, 895	Slayton, Nelson B., Rochester, N. Y. Metallic filling for teeth.	Apr. 2, 1878	36		13	604
205, 508	Same. Apparatus for reducing metal for dental purposes.	July 2, 1878	45	14	14	15
8, 335	Sleeper, Charles T., Chicago, Ill., assignor, by mesne assignments, to C. C. Jerome and David Andrews. Stuffing-box for steam-engines. (Reissue.)	July 16, 1878	779	223	14	115
205, 092	Sleicher, William, jr., Troy, N. Y. Melting and refining iron, and furnaces therefor.	July 2, 1878	246	73	14	40
210, 572	Slevin, James Joseph, New York, N. Y. Garbage-receptacle.	Dec. 3, 1878	203	53	14	849
	Sloan, Frank B. (See Clarkson, Frank S., assignor.)					
	Sloane, John R. (See McDonald, Alexander E., assignor.)					
	Sloane, William M. (See Potter & Sloane.)					
210, 717	Sloane, William M., assignor to Daniel H. Burnett, New York, N. Y. Carbureter for cars.	Dec. 10, 1878	362	99	14	879
	Sloat, L. L. (See Nichols, Mos, assignor.)					
208, 935	Slocum, George Scott, Newport, R. I. Cartridge-loading machine.	Oct. 15, 1878	529	155	14	571
207, 451	Slocum, Manfred Dwight, Union City, Mich. Joinder-clamp.	Aug. 27, 1878	851	251	14	325
203, 505	Sloper, Byron, New York, N. Y. Carbureter.	May 7, 1878	279	80	13	859
208, 765	Slotterbek, Charles, Lakeport, Cal. Telescope attachment for fire-arms.	Oct. 8, 1878	333	95	14	540
201, 057	Slusser, Benjamin, assignor to self and William H. C. Goode, Sidney, Ohio. Earth-scraper.	Mar. 5, 1878	237	75	13	451
201, 058	Same. Revolving earth-scraper.	Mar. 5, 1878	238	75	13	451
209, 730	Slusser, Benjamin, assignor of one-half interest to W. H. C. Goode, Sidney, Ohio. Earth-scraper.	Nov. 5, 1878	198	59	14	707
	Small, Charles Patrick. (See Starbuck & Small.)					
208, 271	Small, Dexter M., New York, N. Y. Gas-test meter.	Sept. 24, 1878	763	223	14	458
207, 432	Small, Jerry, Watkins, N. Y. Machine-belt.	Aug. 27, 1878	851	251	14	325
206, 751	Small, Johnston, Rochester P. O., Pa. Temper-screw and cable-clamp for drilling oil-wells.	Aug. 6, 1878	94	30	14	218
	Smalley, John. (See Smalley, William W., assignor.)					
202, 199	Smalley, Rolan W., Salem, Mass. Whiffletree attachment.	Apr. 9, 1878	364	107	13	634
207, 904	Same. Draft-tug link.	Sept. 10, 1878	347	105	14	596
209, 084	Smalley, William W., assignor to John Smalley, Bound Brook, N. J. Journal-bearing.	Oct. 15, 1878	606	202	14	593
200, 578	Smalstiz, William C., assignor of two-thirds interest to William McAdams, E. T. Robertson, and G. M. Jones, Springfield, Mo. Feathering paddle-wheel.	Feb. 19, 1878	705	207	13	357
206, 979	Smart, Albert J., Greenfield, Mass. Machine for drilling metal.	Aug. 13, 1878	339	{ 104 105 }	14	252
	Smart, James S. (See Little & Smart.)					
204, 919	Smeth, Edward, and George Polhill Harris, Chicago, Ill. Still-column.	June 18, 1878	545	{ 158 159 }	13	1091
209, 932	Smick, Solomon S., Fort Wayne, Ind. Grave-shield and body-protector.	Nov. 12, 1878	430	130	14	742
203, 310	Smiley, Amos N., Bangor, Me. Potato-digger.	June 25, 1878	656	283	13	1151
200, 145	Smith, Aaron F., Lynn, Mass. Machine for forming heel-stiffeners.	July 10, 1878	756	218	14	113
207, 905	Smith, Aaron W., Manchester, N. H., assignor of one-fourth interest to Warren McFarland, Worcester, Mass. Horse-shoe.	Sept. 10, 1878	348	105	14	396
199, 112	Smith, Abraham, Wheeler's Grove, Iowa. Grain-dumping device.	Jan. 8, 1878	398	118	13	78
	Smith, Adam. (See Arkell & Smith.)					
206, 272	Smith, Adolph T., assignor to Abraham L. Bogart, New York, N. Y. Electrode for electric gas-lighting burner.	July 23, 1878	021	261	14	123
	Smith, Albert. (See Barrett & Smith.)					
202, 673	Smith, Albert M., Brooklyn, and Hiram H. Thayer, New York, N. Y. Neck-tie shield.	Apr. 23, 1878	900	258	13	737
208, 691	Smith, Albert N., Brooklyn, N. Y. Safety-pin.	Aug. 6, 1878	37	11	14	211
207, 826	Same. Neck-tie fastener.	Sept. 10, 1878	256	80	14	385
201, 562	Smith, Albert S., Boston, Mass. Oil-cup.	Mar. 19, 1878	573	176	13	513
203, 663	Smith, Alexander, and Halcyon Skinner, Yonkers, N. Y., said Skinner assignor to said Smith. Moquette-carpet.	May 14, 1878	460	131	13	890
209, 590	Smith, Alexander H., and Salathiel S. Thompson, Saint Louis, Mo.; said Thompson assignor to said Smith. Bran-scourer.	Nov. 5, 1878	56	17	14	688
204, 771	Smith, Alfred B., Byron, Ill. Fence-post.	June 11, 1878	360	108	13	1065
206, 629	Smith, Alfred E., Utica, N. Y. Curd-knife.	July 30, 1878	136	381	14	192
207, 313	Smith, Alfred E., Bronxville, N. Y. Shaft and journal.	Aug. 20, 1878	690	206	14	209
208, 341	Smith, Andrew H., Mount Carmel, Conn. Machine for polishing the eyes of needles.	Sept. 24, 1878	834	243	14	467
8, 143	Smith, Andrew J., assignor, by mesne assignments, to Henrietta L. McCormick, Chicago, Ill. Grain-binder. (Reissue.)	Mar. 26, 1878	1107	325	13	593
199, 115	Smith, Andrew Law, Philadelphia, Pa. Bird-cage.	Jan. 8, 1878	406	120	13	79
203, 205	Smith, Andrew M., Drummondville, Ontario, Canada. Crate.	Apr. 30, 1878	1457	426	13	812
204, 855	Smith, Andrew M., Philadelphia, Pa. Sleeping-car.	June 11, 1878	453	{ 132 133 }	13	1075
	Smith, Augustus B. (See Clark & Smith.)					
	Smith, Austin H., et al. (See McConoghney, Hulbert N., assignor.)					
	Smith, Benjamin. (See Arkell & Smith.)					
	Smith, Benjamin L., Gadsden, Ala. Grinding-mill. (Reissue.)	Apr. 2, 1878	202	59	13	627
205, 695	Smith, Byron C., assignor to Hayden & Smith, Auburn, N. Y. Hame.	July 2, 1878	243	74	14	49
202, 062	Smith, Caleb F., Mount Pleasant, N. C. Water-wheel.	Apr. 2, 1878	201	59	13	627
	Smith, Caleb L., et al. (See Douglas, Robert, assignor.)					
201, 712	Smith, Catharine, Utica, N. Y. Water-can.	Mar. 26, 1878	935	287	13	568

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. &	Vol.	Page.
203, 063	Smith, Charles A., Columbus, Ohio. Valve-gear for steam-engines .....	May 14, 1878	459	131	13	890
	Smith, Charles B., <i>et al.</i> (See Theobald, George, assignor.) .....					
206, 092	Smith, Charles B., Newark, N. J. Governor .....	Aug. 6, 1878	38	11	14	211
208, 200	Smith, Charles D., New York, N. Y. Steam-boiler furnace .....	Sept. 17, 1878	679	193	14	444
	Smith, Charles H., <i>et al.</i> (See Farley, Henry W., assignor.) .....					
201, 050	Smith, Charles H., and John Hewitt, Chicago, Ill. Lightning-rod connection .....	Mar. 5, 1878	239	75	13	451
204, 787	Smith, Charles A., assignor to P. & F. Corbin, New Britain, Conn. Latch .....	May 14, 1878	502	165	13	907
200, 771	Smith, Charles James, Norfolk, Va. Safety-stove .....	Feb. 26, 1878	019	270	13	397
202, 288	Smith, Charles Quarles, Maryville, Mo. Cloth measuring and rolling machine .....	Apr. 9, 1878	455	133	13	667
207, 216	Smith, Charles V., and William Farmer, New York, N. Y. Gas-scrubber .....	Aug. 20, 1878	692	177	14	287
	Same .....			178		
208, 644	Same. Center-seal for gas-works .....	Oct. 1, 1878	191	55	14	514
210, 974	Smith, Charley H., Delphos, Ohio. Alarm-bell .....	Dec. 17, 1878	664	183	14	926
	Smith, Charlotte. (See Smith, John F.) .....					
	Smith & Co., James. (See Proctor, Josiah K., assignor.) .....					
	Same .....					
	Smith & Co., R. H. (See Rogers, Arthur H., assignor.) .....					
204, 854	Smith, Cyrus P., Brunswick, Mo. Washing-machine .....	June 11, 1878	452	132	13	1075
	Smith, Daniel. (See Belt, William L., assignor.) .....					
	Smith, Daniel P., <i>et al.</i> (See Ebert, William C., assignor.) .....					
208, 498	Smith, David, assignor to Moses B. Smith, Jamestown, N. Y. Farm-truck .....	Oct. 1, 1878	43	14	14	495
210, 883	Smith, David, Albany, N. Y. Grate .....	Dec. 17, 1878	554	155	14	913
206, 630	Smith, David A., Greencastle, Pa. Combined cider mill and press .....	July 30, 1878	1327	382	14	192
206, 631	Smith, David R., New York, N. Y. Wind-engine .....	July 30, 1878	1328	382	14	192
198, 956	Smith, Dexter, Springfield, Mass. Stop-motion for winding and twisting machinery .....	Jan. 8, 1878	245	70, 71	13	54
	Smith, Dillwyn. (See Perry, William V., assignor.) .....					
209, 429	Smith, Drewry R., Dalton, Ga. Cotton and hay press .....	Oct. 29, 1878	1074	311	14	653
203, 952	Smith, Edgar B., Albany, and George L. Freeman and David H. Burrell, assignors to Whitman & Burrell, Little Falls, N. Y. Cheese-vat .....	May 21, 1878	778	223	13	938
	Smith, Edmond C. (See Dancel & Smith.) .....					
206, 273	Smith, Edward A., Saint Albans, Vt. Chain-link for horse-powers .....	July 23, 1878	922	261	14	138
	Smith, Edward J. (See Hill, Alva T., assignor.) .....					
201, 841	Smith, Edward P., Toledo, Ohio. Testing-pipe .....	Mar. 26, 1878	1069		13	588
190, 586	Smith, Edward S., assignor to Smith & Griggs Manufacturing Company, Waterbury, Conn. Buckle .....	Jan. 22, 1878	902	264	13	165
209, 840	Smith, Edwin D., Charley Christian Matson, and Philip Richard Martin, Utica, Ill. Toe-weight for horses .....	Nov. 12, 1878	336	100	14	730
	Smith & Egge Manufacturing Company. (See Egge, Frederick, assignor.) .....					
208, 208	Smith, Elijah S., Good Hope, Ill. Windmill .....	Sept. 17, 1878	678	199	14	444
	Smith, Eliza R. (See Smith, Niles C., assignor.) .....					
205, 584	Smith, Erasmus, Norwich, N. Y. Hydraulic dredging apparatus .....	July 2, 1878	126	38	14	25
203, 382	Smith, Estill Henry, Keeler, Mich. Current-wheel .....	May 7, 1878	153	44	13	841
206, 639	Smith, Eugene, Philadelphia, Pa. Sawing-machine .....	Aug. 6, 1878	187	59	14	229
	Smith, Francis. (See Moore, Joseph, assignor.) .....					
	Smith, Frederic William. (See Hurst & Smith.) .....					
202, 877	Smith, Frederick M., Otisville, Mich. Ironing-table .....	Apr. 23, 1878	1115	320	13	764
201, 205	Smith, Fredrick Morton, Vermillion, Dak. Hog-catcher .....	Mar. 12, 1878	385	119	13	480
	Smith & French. (See Robinson, Clark, assignor.) .....					
	Smith, G. Canning. (See Hamilton & Smith.) .....					
8, 428	Smith, George, Brooklyn, N. Y., assignor, by mesne assignments, to William W. Hanna. Coal-scuttle .....	Sept. 24, 1878	958	280	14	482
	Same .....					
199, 001	Smith, George B., Philadelphia, Pa. Wooden shingles made fire-proof .....	Jan. 8, 1878	293		13	61
	Smith, George C. (See Hall, Alvin O., assignor.) .....					
201, 295	Smith, George C., Baltimore, Md. Alarm-register .....	Mar. 12, 1878	485	149	13	494
210, 159	Same .....	Nov. 19, 1878	686	204	14	780
201, 636	Smith, George E., Racine, Wis., assignor to William Aiken and William W. Drummond, Louisville, Ky. Founder's molding-machine .....	Mar. 26, 1878	868	264	13	558
8, 463	Smith, George F., Michigan City, Ind., assignor, by mesne assignments, of three-fourths interest to C. W. Woods, H. C. Smith, and Abram Colborn. Refrigerator .....	Oct. 22, 1878	948	276	14	632
	Same .....			277		
	Smith, George H., <i>et al.</i> (See Colcs, Erskine A., assignor.) .....					
200, 580	Smith, George K., Brooklyn, N. Y. Carriage-spring .....	Feb. 19, 1878	708	208	13	358
204, 101	Smith, George Martin, Delhi, Ind. Clothes-pounder .....	May 21, 1878	937	268	13	958
	Smith, George S. (See Horriott & Smith.) .....					
200, 300	Smith, George S., Mystic Bridge, Conn. Take-up and let-off mechanism for looms .....	Oct. 22, 1878	930	271	14	630
208, 036	Smith, George T., Jackson, Mich. Middlings-separator .....	Oct. 15, 1878	530	155	14	571
	Same .....			156		
109, 751	Smith, George W., Hubbardston, Mich. Safety attachment for steam-boilers .....	Jan. 20, 1878	1088	319	13	202
199, 869	Smith, Gerritt, Astoria, N. Y., assignor to George B. Prescott, New York, N. Y., and Western Union Telegraph Company. Duplex telegraph .....	Jan. 29, 1878	1108	352	13	218
	Smith & Griggs Manufacturing Company. (See Smith, Edward S., assignor.) .....					
204, 850	Smith, H. C., <i>et al.</i> (See Smith, George F., assignor.) .....	June 11, 1878	449	131	13	1075
204, 851	Smith, Hamilton E., Jersey City, N. J. Clothes-wringer .....	June 11, 1878	450	131	13	1075
204, 852	Same .....	June 11, 1878	451	132	13	1075
	Same .....					
208, 643	Smith, Hamilton E., New York, N. Y. Ironing-machine .....	Oct. 1, 1878	189	55	14	514
203, 084	Smith, Heman Reed, Minnesota Lake, Minn. Cooking-stove .....	Apr. 30, 1878	1328	386	13	796
203, 086	Same .....	Apr. 30, 1878	1330	387	13	796
207, 628	Smith, Heman S., Brooklyn, N. Y. Machine for cutting veneers .....	Sept. 3, 1878	44	14	14	354
	Smith, Henry. (See Parks, Dana, assignor.) .....					
207, 562	Smith, Henry, assignor of one-half interest to Joseph F. Kelly, West Meriden, Conn. Metal-turning tool .....	Aug. 27, 1878	972	285	14	340
	Smith, Henry C. (See Salisbury & Smith.) .....					
	Smith, Henry T. (See Frost & Smith.) .....					
210, 641	Smith, Henry T., and Daniel W. Vowles, Washington, D. C. Seal-lock .....	Dec. 10, 1878	284	78	14	870
201, 296	Smith, H. Julius, Mountain View, N. J. Magneto-electric machine .....	Mar. 12, 1878	486	150	13	404
	Smith, H. M., <i>et al.</i> (See Bradbury & Barstow, assignors.) .....					
8, 516	Smith, Henry W., West Newton, Mass. Reed-organ .....	Dec. 10, 1878	480	135	14	805
205, 017	Same .....	July 9, 1878	505	143	14	76
207, 906	Same .....	Sept. 10, 1878	348	106	14	396
207, 907	Same .....	Sept. 10, 1878	349	106	14	396
207, 908	Same .....	Sept. 10, 1878	350	106	14	396
200, 945	Smith, Herbert S., Brooklyn, N. Y. Shade for children's carriages .....	Mar. 5, 1878	122	40	13	434
207, 312	Smith, Hiram B., assignor of one-half interest to William Chambers, Philadelphia, Pa. Folding rocking-chair .....	Aug. 20, 1878	690	205	14	390

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. p.	Vol.	Page.
210, 971	Smith, Horace A., Brooklyn, N. Y., assignor to self and Robert Foulds, Passaic, N. J. Toy pistol.....	Dec. 17, 1878	662	182	14	925
	Smith, Horace G., <i>et al.</i> (See Blincoe, John D., assignor.)					
	Smith, Horace S. (See Scutt & Smith.)					
	Smith, Hudson. (See Jilison & Smith.)					
200, 779	Smith, James A., Wenona, Ill. Plow.....	Nov. 12, 1878	271	81	14	721
200, 721	Smith, James G., Chagrin Falls, Ohio. Stove.....	Nov. 5, 1878	190	59	14	707
201, 562	Smith, James H., Monticello, Ark. Stalk-puller.....	Mar. 19, 1878	775	236	13	541
203, 085	Same..... Peach-cutter.....	Apr. 30, 1878	1330	386	13	796
	Smith, James S., <i>et al.</i> (See Mentzer, William G., assignor.)					
	Smith, James W. (See Jones, Smith & Adams.)					
	Same..... (See Miller, Andrew Alonzo, assignor.)					
205, 004	Smith, Jane B., Worcester, Mass. Device for greasing baking-dishes.....	June 18, 1878	627	184	13	1162
203, 050	Smith, Jesse C., Centerville, Iowa. Metallic horse-collar.....	May 21, 1878	777	222	13	938
198, 820	Smith, Jesse Merrick, Newark, Ohio. Hot-blast oven.....	Jan. 1, 1878	99	28	13	23
208, 993	Smith, J. Nottingham, Jersey City, N. J. Car-axle box.....	Oct. 15, 1878	588	172	14	579
207, 900	Smith, John Blunt, Pleasant Mount, Pa. Lifting-jack.....	Sept. 10, 1878	350	106	14	396
201, 060	Smith, John E., New York, N. Y. Telephone.....	Mar. 5, 1878	239	76	13	451
208, 830	Smith, John E., Buffalo, N. Y. Meat-cutter.....	Oct. 8, 1878	439	127	14	555
202, 674	Smith, John F., deceased, Charlotte Smith, administratrix, Chelsea, Mass. Bench-plane.....	Apr. 23, 1878	900	258	13	737
209, 365	Smith, John F. S., assignor to David F. Brunner, Chicago, Ill. Cake-cutting machine.....	Oct. 29, 1878	1011	294	14	644
	Smith, John H. (See Moss, Smith & Hill.)					
207, 825	Smith, John S., Jackson, Mich. Gate-hanger.....	Sept. 10, 1878	255	80	14	385
202, 679	Smith, John T., assignor of one-half interest to William G. Morris, Aurora, Ill. Har-ness-pad.....	Apr. 23, 1878	1116	321	13	764
	Smith, John V. (See Connelly, Austin, assignor.)					
207, 778	Smith, Joseph, <i>et al.</i> (See Schall, William H., assignor.)					
208, 858	Smith, Joseph, Elyria, Ohio. Cultivator.....	Sept. 3, 1878	197	60	14	374
	Smith, Joseph A., Deep River, Conn. Button-hook.....	Oct. 8, 1878	428	126	14	555
	Smith, Joseph Alexander. (See Whiting & Smith.)					
190, 113	Smith, Joseph D., assignor of one-half interest to Ralph Emerson and W. A. Talcott, Rockford, Ill. Corn-planter.....	Jan. 8, 1878	399	119	13	78
201, 297	Smith, Joseph D., Rockford, Ill. Stump-puller.....	Mar. 12, 1878	489	150	13	494
204, 627	Same..... Stump-extractor.....	June 4, 1878	205	65, 66	13	1041
205, 603	Smith, Joseph Flory, Tyler, Tex. Corn-cob splitter.....	July 2, 1878	248	74	14	40
201, 844	Smith, Joseph Sewell, and James Madison Davis; said Davis assignor to said Smith, Bangor, Me. Extension-ladder.....	Mar. 26, 1878	1672	326	13	588
201, 458	Smith, Joseph William, Boston, Mass. Suspender-clasp.....	Mar. 19, 1878	669	204	13	526
208, 428	Same..... Combined cane and seat.....	Sept. 24, 1878	927	271	14	479
200, 227	Smith, Joshua M., and Henry W. C. Thomas, Springfield, Ohio. Grain-drill.....	Feb. 12, 1878	342	102	13	294
210, 719	Same..... same.....	Dec. 10, 1878	565	160	14	879
202, 763	Smith, Josiah, Oswego, Ill. Corn-cultivator.....	Apr. 23, 1878	991	285	13	748
	Smith, Julia M. (See Stearns, William Ellison, assignor.)					
	Smith, Junius. (See Sanders & Smith.)					
206, 361	Smith, Levi F., Philadelphia, Pa. Steam-trap.....	July 23, 1878	1029	295	14	151
209, 364	Smith, Lewis, and Robert Booth, Sherbrooke, assignors, by mesne assignment, to Nep-tune Fog Horn Company (limited), Quebec, Canada. Fog-horn.....	Oct. 29, 1878	1009	294	14	644
207, 563	Smith, Lyman, New Haven, Conn. Waistband.....	Aug. 27, 1878	973	285	14	340
190, 587	Smith, Lyman T., New Haven, Conn. Corset.....	Jan. 22, 1878	902	264	13	165
	Smith, Machine Company, H. B. (See Saltar, John, jr., assignor.)					
	Same..... (See White, Joseph J., assignor.)					
203, 786	Smith, Mark A., Evansville, Ind. Wash-board.....	May 14, 1878	592	165	13	906
205, 148	Smith, Mark A., assignor to Frederick W. Brinkmeyer and John E. Harper, Evansville, Ind. Wash-board.....	June 18, 1878	774	226	13	1121
208, 766	Smith, Marshall P., Waverly, Md. Brick-drying oven.....	Oct. 8, 1878	333	95, 96	14	549
209, 589	Smith, Marshall P., and William W. Woolford, Baltimore, Md.; said Woolford assignor to said Smith. Grain-drier.....	Nov. 5, 1878	54	16, 17	14	688
210, 718	Smith, Matthew, Waxahatchie, Tex. Cultivator.....	Dec. 10, 1878	363	100	14	879
210, 160	Smith, Melvin O., Chenango Forks, N. Y. Draft-cvener.....	Nov. 19, 1878	687	204	14	780
190, 000	Smith, Michael H., Halifax, England. Furnace-feeder.....	Jan. 8, 1878	292	85, 86	13	61
200, 486	Smith, Milton H. M., Ithaca, N. Y. Apparatus for attaching harness to the shafts.....	Feb. 19, 1878	614	181	13	243
210, 978	Smith, Milton W., and Eli J. Richey, Scottsburg, Ind. Grain-drill.....	Dec. 17, 1878	963	183	14	926
	Smith, Moses B. (See Smith, David, assignor.)					
205, 918	Smith, Moses C., Starkville, assignor to Edwin S. Lenox, New York, N. Y. Bale-tie.....	July 9, 1878	505	143	14	76
206, 362	Same..... same.....	July 23, 1878	1030	295	14	151
206, 693	Smith, Nelson, Vinton, Iowa. Weather-strip.....	Aug. 6, 1878	38	11	14	211
209, 830	Smith, Niles C., assignor to Eliza R. Smith, New York, N. Y. Machine for making } metal buttons.....	Nov. 12, 1878	335	100	14	739
210, 813	Smith, Orren M., assignor to S. W. Evans & Son, Frankford, Pa. Umbrella-runner.....	Mar. 26, 1878	1070	325	13	388
205, 430	Smith, Orson J., Farmer City, Ill. Watering-trough.....	Dec. 10, 1878	463	139	14	893
208, 544	Same..... Device for feeding stock.....	June 25, 1878	1079	320	13	1166
205, 583	Smith, Othniel J., Wauwatosa, Wis. Whistle-tree-hook.....	Oct. 1, 1878	88	25, 26	14	501
	Smith, Paul. (See Havenhill, Edwin, assignor.)	July 2, 1878	126	38	14	25
198, 858	Smith, Philester, assignor of one-half interest to Samuel W. Sawyer, Palmyra, N. Y. Gate.....	Jan. 1, 1878	137	39	13	20
207, 824	Smith, Phillip, Pacific City, Iowa. Wagon-brake.....	Sept. 10, 1878	255	80	14	385
208, 427	Smith, Robert, and Philip Connolly, Brooklyn, N. Y. Water-closet valve.....	Sept. 24, 1878	926	271	14	478
208, 342	Smith, Robert McFarland, Ludlow, Ky. Package of plug-tobacco.....	Sept. 24, 1878	835	244	14	467
	Smith, Robert P., <i>et al.</i> (See Atwater, Richard M., assignor.)					
	Smith, Roderick A., and George Chase, Spirit Lake, Iowa. Grain-separator.....	Oct. 22, 1878	775	225	14	608
	Smith, Rodney B. (See Porter, Frederick E., assignor.)					
8, 052	Smith, Roswell T., assignor, by mesne assignments, to American Shearer Manufactur-ing Company, Nashua, N. H. Animal-shearing machine.....	Jan. 22, 1878	941	274	13	171
207, 141	Smith, Roswell T., Nashua, N. H. Embroidery-pattern.....	Aug. 20, 1878	515	155	14	273
	Smith, Rufus. (See Peer, John A., assignor.)					
210, 437	Smith, Samuel, Mabelvale, assignor to self and Dudley E. Jones, Little Rock, Ark. Rotary harrow and cultivator.....	Dec. 3, 1878	49	12	14	830
210, 972	Smith, Samuel, Brooklyn, N. Y. Coal-scuttle.....	Dec. 17, 1878	963	183	14	926
204, 770	Smith, Samuel C., Norristown, Pa. Hose-clamp.....	June 11, 1878	360	108	13	1065
200, 772	Smith, Scott A., Providence, R. I. Bracket for book-shelves.....	Feb. 26, 1878	920	271	13	398
200, 773	Same..... Book-shelf.....	Feb. 26, 1878	921	271	13	398
199, 114	Smith, Seth H., assignor of two-thirds interest to G. H. Felt and George W. Green, Brooklyn, Mich. Windmill.....	Jan. 8, 1878	405	119	13	79



## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
204, 853	Smith, Seymour, assignor to Smith & Son, Watertown, Conn. Bench-hook	June 11, 1878	451	132	13	1075
205, 694	Smith, Shadrach T., Kasson, Minn., assignor to Samuel H. and Edward Y. Moore, Chicago, Ill. Stove-polishing composition	July 2, 1878	249	.....	14	40
201, 563	Smith, Sidney B., Eminence, Ky., and Allison B. McCulley, Decatur County, Tenn. Harrow	Mar. 10, 1878	575	177	13	513
200, 001	Smith, Silas, Hammondsport, N. Y. Sliding door	Feb. 5, 1878	107	35	13	250
201, 450	Smith, Simeon, Deersville, Ohio. Wagon-jack	Mar. 10, 1878	669	204	13	526
	Smith & Son. (See Smith, Seymour, assignor.)					
	Smith, Thaddeus S. (See Andrews, Edwin F., assignor.)					
207, 910	Smith, Theophilus S. (See Chicken, William, assignor.)					
	Smith, Thomas C., Green Point, N. Y. Ice-pitcher	Sept. 10, 1878	352	107	14	396
	Smith, Thomas E., et al. (See Glazier, George W., assignor.)					
	Smith, Thomas J. (See Clements & Decker, assignors.)					
201, 842	Smith, Thomas S., assignor of one-third interest to William H. Moore, Fair Haven, Conn. Furniture-caster	Mar. 26, 1878	1070	325	13	588
202, 878	Smith, Thomas S., Subigna, and Christopher C. Boyle, Alpine, Ga. Seed-planter and fertilizer-distributor	Apr. 23, 1878	1116	320	13	764
210, 438	Smith, Thomas S., Fair Haven, Conn. Bottle-stopper fastening	Dec. 3, 1878	51	12	14	830
	Smith, Thomas T. (See Spencer, Elisha L., assignor.)					
8, 446	Smith, Uriah, Battle Creek, Mich. Folding seat for school-desks (Reissue)	Oct. 8, 1878	464	134	14	558
200, 096	Smith, Walton Duane, assignor of one-half interest to F. J. Barber, Prophetstown, Ill. Lamp-wick	Feb. 5, 1878	206	65	13	265
207, 564	Smith, Walton Duane, assignor of one-half interest to A. J. Warner, Prophetstown, Ill. Raising and lowering torpedoes	Aug. 27, 1878	974	285 } 286 }	14	340
201, 061	Smith, Wesley, assignor of one-half interest to H. H. Osgood, Adrian, Mich. Car-heater	Mar. 5, 1878	240	76	13	451
8, 437	Smith, Willard H., New York, N. Y. Vapor-burner (Reissue)	Sept. 24, 1878	968	283	14	484
190, 870	Smith, William, assignor of four-fifths interest to Winfield S. Rollings, Harrison H. Stout, Albert R. Tucker, and E. C. Cook, Cicero, Ind. Revolving grate for cook-stoves	Jan. 29, 1878	1201	352	13	210
200, 579	Smith, William, Carmi, Ill. Ditching machine	Feb. 10, 1878	708	207 } 208 }	13	357
206, 049	Smith, William, San Francisco, Cal. Valve for water-closets	July 16, 1878	652	189	14	101
209, 931	Smith, William, Carmi, Ill. Thill-supporter	Nov. 12, 1878	430	130	14	743
210, 562	Same. Fly-trap	Dec. 3, 1878	188	50	14	847
203, 851	Smith, William Carroll, Jackson, Tenn. Seed-planter	May 21, 1878	777	223	13	938
200, 044	Smith, William H., assignor of one-half interest to William Ebbitt, New York, N. Y. Valve-coupling for vacuum-pipes	Mar. 5, 1878	121	40	13	434
208, 097	Smith, William H., and Matthias C. Osborn, Hightown, Ala. Lubricant	Oct. 8, 1878	200	.....	14	531
	Smith, W. L., et al. (See Titus, Nathaniel J., assignor.)					
204, 387	Smith, William M., Augusta, Ga. Excavator and submarine plow	May 28, 1878	1254	357	13	1002
200, 154	Smith, William O., Kimmund, Ill. Steam-vaporizer	Feb. 12, 1878	270	81	13	283
203, 383	Smith, William T., Baltimore, Md. Saw-filing machine	May 7, 1878	154	44, 45	13	841
201, 062	Smith, William W., Chicago, Ill. Egg-carrier	Mar. 5, 1878	241	76	13	452
208, 429	Smithers, Joseph P., Brooklyn, N. Y. Lamp-burner	Sept. 24, 1878	927	271	14	479
208, 994	Smith, Jared H., Norwich, Conn. Draw-bar attachment for railway-cars	Oct. 15, 1878	501	172	14	579
203, 381	Smoot, William G., Washington, D. C. Bag-tag and fastener	May 7, 1878	152	44	13	841
	Smyser, E. G. (See Teahl, John H., assignor.)					
202, 880	Smyth, Abesalom Griffin, Hamilton, Ontario, Canada. Device for converting motion	Apr. 23, 1878	1118	321	13	764
202, 764	Smyth, David M., East Northwood, N. H. Electro-magnetic water-raising apparatus	Apr. 23, 1878	992	285	13	748
199, 752	Smyth, Samuel, Pittston, Pa. Grate for stoves and ranges	Jan. 29, 1878	1089	319	13	202
208, 767	Same. Grate for stoves and furnaces	Oct. 8, 1878	335	96	14	540
204, 628	Smythe, James C., assignor to Hiram Smythe, Plymouth Pa. Miner's lamp	June 4, 1878	206	66	13	1041
205, 706	Smythe, Job, Hallsport, N. Y. Harvester-cutter	July 9, 1878	341	99	14	55
	Smythe, William. (See Smythe, James C., assignor.)					
210, 215	Snapp, James W., assignor of one-third interest to William E. Donaldson, Jasper, Tenn. Car-coupling	Nov. 26, 1878	760	226	14	793
208, 698	Snedeker, David, Jersey City, N. J. Box for dried fruit	Oct. 8, 1878	260	74	14	531
208, 046	Snediker, William E., Trenton, N. J. Wire-band cutter	Sept. 17, 1878	511	152	14	422
202, 126	Sneider, Charles W., Baltimore, Md. Breach-loading fire-arm	Apr. 9, 1878	287	84	13	644
206, 633	Snell, George S., Saint Louis, Mo. Lock	July 30, 1878	1330	382	14	192
206, 632	Snell, Samuel, Springfield, Mass. Perforated tile for draining paper-stock and for other purposes	July 30, 1878	1330	382	14	192
204, 102	Snell, Sylvester, Watertown, N. Y. Animal-trap	May 21, 1878	937	268	13	958
207, 688	Snider, Hiram, Plattsville, Ontario, Canada. Grain-meter	Sept. 3, 1878	103	31	14	362
202, 064	Snider, John W., New Orleans, La. Door-bell	Apr. 2, 1878	203	59	13	627
205, 431	Snider, Morris M., Ames, Iowa. Air-distributing pipe for furnaces	June 25, 1878	1060	320	13	1166
	Snook, Albert. (See Orwig, Thomas G., assignor.)					
190, 753	Snow, Augustus E., assignor to Thomas Potter, Philadelphia, Pa. Machine for rubbing oil-cloths	Jan. 29, 1878	1089	320	13	202
205, 500	Snow, Charles P., assignor of one-half interest to Hiram Bright, Freeport, Ill. Plow	July 2, 1878	47	14	14	15
	Snow, George B., et al. (See Fletcher, Thomas, assignor.)					
8, 046	Snow, George K., Watertown, Mass. Die for making collars (Reissue)	Jan. 22, 1878	934	272	13	169
207, 565	Snow, Thomas, Social Circle, Ga. Pounder washing-machine	Aug. 27, 1878	975	286	14	341
205, 149	Snyder, Alva L., Bryan, Ohio. Sample reel	June 18, 1878	774	229	13	1122
	Snyder, Andrew P. (See Buzzard & Snyder.)					
204, 920	Snyder, Anna T., Connorsville, Ind. Caloric-safe	June 18, 1878	547	159	13	1001
203, 206	Snyder, Charles, Rouseville, Pa. Pumping apparatus for oil-wells	Apr. 30, 1878	1458	426	13	813
	Snyder, Charles Carroll. (See Lynn & Snyder.)					
208, 860	Snyder, John F., assignor of one-half interest to F. D. Johnson, Culpeper, Va. Fence-post	Oct. 8, 1878	439	127	14	555
208, 430	Snyder, John H., Richmond, Va. Machine for bending horseshoe-blanks	Sept. 24, 1878	928	272	14	479
206, 274	Snyder, William J., Manor Station, Pa. Dough-raiser	July 23, 1878	923	261	14	138
	Société Anonyme des Seychelles. (See Pallu, Eug., assignor.)					
199, 476	Soden, Thomas J., Brooklyn, N. Y. Ice-cream freezer	Jan. 22, 1878	785	231	13	146
206, 752	Sodunlund, Peter, Swede Point, Iowa. Corn-plow	Aug. 6, 1878	95	30	14	218
200, 002	Sockney, Christian E., Baltimore, Md. Chimney-cowl	Feb. 5, 1878	107	35	13	250
209, 722	Soelkecken, Frederick, Bonn-on-the-Rhine, Prussia, Germany. Multiple-pen	Nov. 5, 1878	201	60	14	708
203, 664	Sola, Andrew A., Brooklyn, N. Y. Tray-lifter for trunks	May 14, 1878	461	131	13	890
	Solar Stove Works. (See Moore, William N., assignor.) (Reissue)					
210, 473	Solomon, James K. B., Riegelsville, N. J. Standing bench-vise	Dec. 3, 1878	87	22	14	835
204, 629	Solomons, Abraham A., Savannah, Ga. Medical compound	June 4, 1878	206	.....	13	1041
203, 506	Solter, John, Baltimore, Md. Sheet-metal can	May 7, 1878	281	80	13	859
199, 588	Soltmann, Gustav, New York, N. Y. Quadrant parallel section-line ruler	Jan. 22, 1878	903	264	13	165
200, 774	Somers, Daniel M., New York, N. Y. Machine for inserting and clinching metallic staples	Feb. 26, 1878	922	271	13	398

*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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208,343	Somers, Daniel M., Brooklyn, N. Y. Hinge for metallic boxes .....	Sept. 24, 1878	837	244	14	467
209,933	Sumo. .... Pocket traveling-box .....	Nov. 12, 1878	431	130	14	742
8,221	Somes, Daniel E., Washington, D. C. Apparatus for ventilating and cooling and drying grain .....	(Reissue.)				
203,562	Sondermeyer, Frederik, Morrissey, Ill. Millstone-pick .....	May 7, 1878	312	90	13	864
202,289	Soper, Rico D., Owatonna, Minn. Herder .....	May 14, 1878	365	103	13	819
207,689	Soper, William, Reading, Pa. Breech-loading fire-arm .....	Apr. 9, 1878	456	133	13	667
208,768	Sorverson, Soren P., Rio Vista, Cal. Chair-brace .....	Sept. 3, 1878	104	31, 32	14	262
199,754	Soule, Charles W., assignor to Frank Tripp, Boston, Mass. Lamp-extinguisher .....	Oct. 8, 1878	315	96	14	541
210,216	Soule, Clark. (See Soule, George H., assignor.)	Jan. 29, 1878	1000	320	13	202
	Soule, George H., Bangor, Me., assignor of one-half interest to Clark Soule. Railway-switch .....					
201,465	Soule, George W., Morton, Miss. Cotton and hay press .....	Nov. 26, 1878	761	226	14	794
	Soule, Oscar F. (See Merrill & Soule) .....	Mar. 19, 1878	674	206	13	527
200,141	Southard, George, Oakwood, Ill. Temporary binder for manifold writing .....	(Reissue.)				
210,720	Southard, George E. (See Southard, Crowell & Hallock, assignors.)	Oct. 22, 1878	776	226	14	608
	Southard, Henry S., North East, and Helen C. Crowell and John K. Hallock, Erie, assignors of one-half interest to George E. Southard, North East, Pa. Joint for oil-well tools .....					
	Southard, Robertson & Co. (See Robertson, George W., assignor.)	Dec. 10, 1878	367	100	14	880
207,453	Souther, George, Boston, Mass. Car-truck .....	Aug. 27, 1878	852	252	14	325
209,301	Southworth, Henry, Alfordville, Ind. Cut-off .....	Oct. 22, 1878	932	272	14	630
208,210	Southworth, Lyman V., Newport, Mich. Clover thrasher and huller .....	Sept. 17, 1878	680	200	14	444
199,116	Spadone, Amadeo, Jersey City, N. J. Vulcanized-rubber roll .....	Jan. 8, 1878	407	120	13	79
208,431	Same. .... Belting .....	Sept. 24, 1878	919	272	14	479
208,432	Same. .... same .....	Sept. 24, 1878	930	272	14	479
210,217	Spaethe, Wilhelm, Gera, German Empire. Accordion .....	Nov. 26, 1878	763	227	14	794
202,065	Spain, David, and Bascomb H. Reynolds, North Lewisburg, Ohio. Washing-machine .....	Apr. 2, 1878	203	59, 60	13	628
204,772	Spalckhaver, William, Brooklyn, assignor to R. Hoe & Co., New York, N. Y. Paper-folding machine .....	June 11, 1878	361	{ 108 109 110 }	13	1065
203,208	Spalding, Dwight M., South Woodstock, assignor of one-half interest to Joel R. Holcomb and E. Knight Sperry, Hartford, Conn. Brush and broom holder .....	Apr. 30, 1878	1460	427	13	813
204,103	Spalding, Orlando D., assignor of two-thirds interest to Origen S. and Timothy F. Williams, Mitchell, Iowa. Grain-elevator .....	May 21, 1878	938	268	13	958
205,910	Same. .... Elevator-cup .....	July 9, 1878	506	144	14	76
210,814	Spalding, Orlando D., assignor of one-half interest to Robert W. Barnett, Mitchell, Iowa. Car-axle .....	Dec. 10, 1878	464	130	14	890
204,257	Spang, Henry W., Reading, Pa. Lightning-conductor .....	May 28, 1878	1122	321	13	965
208,995	Same. .... Electro-magnetic railway-signal .....	Oct. 15, 1878	592	172	14	579
203,953	Sparkes, James Henry, assignor to self, James Deland, and Charles D. Hyndman, Clinton, Ill. Railway-crossing .....	May 21, 1878	781	224	13	838
204,856	Sparks, Thomas W., Philadelphia, Pa. Alloy for the manufacture of shot .....	June 11, 1878	454		13	1076
201,958	Sparks, William E. (See Fogelstrand & Sparks.)					
209,990	Sparks, William E., assignor to P. & F. Corbin, New Britain, Conn. Reversible latch .....	Apr. 2, 1878	93	27	13	613
	Same. .... same .....	Nov. 19, 1878	503	153	14	735
406,275	Sparks, William H. (See Evans & Sparks.)					
	Sparrow, Benjamin F., assignor to Herbert F. Sparrow, Cambridgeport, Mass. Dough-mixer .....	July 23, 1878	924	262	14	138
204,509	Sparrow, Herbert F. (See Sparrow, Benjamin F., assignor.)					
201,563	Spaulding, Albert J., and John R. Hibbs, Smyrna, Ohio. Harvester safety attachment .....	June 4, 1878	83	28	13	1024
199,589	Spaulding, George Henry, assignor of one-half interest to William A. Knowlton, Rockford, Ill. Harvester .....	Mar. 19, 1878	776	{ 236 237 }	13	541
200,097	Spaulding, Mark Warren, Rensselaer Falls, N. Y. Hold-back attachment for carriages .....	Jan. 22, 1878	905	264	13	165
205,311	Spaulding, Nathan W., San Francisco, Cal. Swage for saw-teeth .....	Feb. 5, 1878	207	65	13	265
	Same. .... Manufacture of saw-teeth .....	June 25, 1878	957	{ 283 284 }	13	1151
205,005	Spaulding, Rufus H. (See Maine, Sebena C., assignor.)					
201,560	Spear, Samuel S., South Weymouth, Mass. Sash-holder .....	June 18, 1878	628	184	13	1102
	Spear, Thomas, Green Bay, Wis., assignor of one-half interest to Arthur R. Atkins and James L. Beckwith, Chicago, Ill. Steering apparatus .....	Mar. 19, 1878	572	176	13	513
205,585	Spearin, Chauncey. (See Kinney, Simon, assignor.)					
205,432	Spearmann, John Roberson, Silver Street, S. C. Bee-hive .....	July 2, 1878	127	38	14	25
	Speckmann, Henry P., Louisville, assignor of one-half interest to Tom. J. Minary, Jefferson County, Ky. Change-gate .....	June 25, 1878	1081	320	13	1167
198,821	Spedden, Eugene. (See Spedden, Robert R. and Eugene.)					
200,673	Spedden, Robert R. and Eugene, Astoria, Oreg. Rowlock .....	Jan. 1, 1878	100	28	13	23
205,586	Spedden, Robert R., and Daniel F. Stafford, Astoria, Oreg. Anchor .....	Feb. 26, 1878	823	242	13	383
	Speer, James Thomas, Oelwein, Iowa. Permutation-lock .....	July 2, 1878	128	38	14	25
	Speer, Leopold J. (See Kaufmann, Bertha, assignor.)					
	Speer & Sons, Alexander. (See Carson, Hugh, assignor.)					
	Same. .... (See Wansbrough & Speer, assignors.)					
199,590	Speer, William W. (See Wansbrough & Speer.)					
200,775	Speer, William W., Pittsburg, Pa. Cotton-sweep .....	Jan. 22, 1878	905	265	13	165
	Speers, Noah W., assignor of one-eighth interest to Ada Brow, Memphis, Tenn. Balcic and apparatus for applying the same .....	Feb. 26, 1878	925	272	13	398
205,767	Spees, David F., assignor to self, David H. Parmelee, and Edward P. Miller, Indianapolis, Ind. Grain-car door .....	July 9, 1878	341	99	14	55
202,881	Speidel, Carl, Karlsruhe, Baden, Germany. Car-truck .....	Apr. 23, 1878	1120	322	13	765
204,388	Speller, Walter P. (See Reilly & Speller.)					
	Speller, Walter P., New York, N. Y. Inkstand .....	May 28, 1878	1255	357	13	1002
208,760	Spelman, William C. (See Werner, John F., assignor.)					
	Spelman, Rowley, Newton, Iowa. Land-marker .....	Oct. 8, 1878	336	96	14	541
205,433	Spence, David. (See Shaw & Spence.)					
	Spencer, Allen D., assignor of one-half interest to William Stewart, Baltimore, Md. Packing device for packing-boxes .....	June 25, 1878	1082	320	13	1167
208,272	Spencer, Archelous E., assignor of two-thirds interest to Charles R. Steele and V. Clarence Price, Chicago, Ill. Machine for making yeast-cake .....	Sept. 24, 1878	764	{ 223 224 }	14	458
204,457	Spencer, Charles A. (See Clarke, Almon, assignor.)					
207,314	Spencer, Charles F., Rochester, N. Y. Lamp .....	June 4, 1878	42	13	13	1018
208,433	Same. .... same .....	Aug. 20, 1878	602	206	14	200
	Same. .... Postage and revenue stamp .....	Sept. 24, 1878	930	273	14	479
208,645	Spencer, Elijah Edmunds. (See Morrison, William A., assignor.)					
	Spencer, Elisha L., assignor of one-half interest to Thomas T. Smith, Millville, Mass. Self-measuring faucet .....	Oct. 1, 1878	194	56	14	515

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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210, 058	Spencer, Ellis L., Tama City, Iowa. Double-acting force-pump .....	Nov. 19, 1878	576	173	14	705
206, 276	Spencer, John, Chicago, Ill. Varnishing-machine .....	July 23, 1878	925	262	14	138
203, 563	Spencer, Luke G., assignor to E. & T. Fairbanks & Co., Saint Johnsbury, Vt. Plat- form-scales .....	May 14, 1878	367	103	13	879
200, 934	Spencer, Robert, Columbus, Ohio. Refrigerator .....	Nov. 12, 1878	432	130	14	742
198, 850	Spencer, William D., assignor of one-half interest to Fred Van Sands, Middletown, Conn. Hasp-lock .....	Jan. 1, 1878	138	39	13	30
201, 564	Spencer, William D., Middletown, assignor to Norwalk Lock Company, South Nor- walk, Conn. Padlock .....	Mar. 19, 1878	779	237	13	541
210, 218	Spencer, William Denison, assignor to self and Henry S. Leonard, Middletown, Conn. Caster .....	Nov. 26, 1878	763	227	14	704
199, 323	Spengler, Christian G., Hoboken, N. J. Carbureting attachment for gas-burners .....	Jan. 15, 1878	627	182	13	113
202, 066	Spengler, Christian George, Hoboken, N. J. Vapor-burner .....	Apr. 2, 1878	204	60	13	628
	Sperber, August. (See Anderson & Sperber.) .....					
204, 389	Sperry, Alfred W., Wallingford, Conn. Corkscrew .....	May 28, 1878	1256	358	13	1002
8, 480	Sperry, E. Knight, et al. (See Spalding, Dwight M., assignor.) .....	Nov. 5, 1878	234	70	14	712
8, 481	Sperry, John, New York, N. Y. Manufacturing boxes .....	Nov. 5, 1878	234	70	14	712
200, 353	Spelman, William, assignor of one-half interest to Martin Connelly, Philadelphia, Pa. Railway-switch .....	Feb. 12, 1878	475	140	13	314
202, 290	Spies, Carl F., New York, N. Y. Leaf-turner .....	Apr. 9, 1878	456	133	13	667
	Spindler, Charles E., et al. (See Fuchs, Henry, assignor.) .....					
206, 050	Springer, Frederick J. (See Gillespie & Springer.) .....					
200, 495	Springer, Frederick J., Edwardsville, Ill. Vehicle-spring .....	July 16, 1878	654	189	14	101
	Spiss, John Peter, Fairview, Ill. Leaves-trough hanger .....	July 30, 1878	1194	342	14	175
204, 258	Spittle, William Frederick. (See West & Spittle.) .....					
202, 291	Spitz, Israel, Chicago, Ill. Horse-brake .....	May 28, 1878	1124	321	13	985
206, 363	Spoerl, Christian S. E. and John George, Brooklyn, N. Y. Rocking-chair .....	Apr. 9, 1878	457	134	13	667
	Same .....	July 23, 1878	1031	296	14	151
	Spoerl, John G. (See Spoerl, Christian S. E. and John G.) .....					
200, 628	Spooford, Charles. (See Hoffman & Spooford.) .....					
8, 215	Spooford, Charles, New York, N. Y. Paper-collar machine .....	Nov. 5, 1878	100	29, 30	14	694
	Spooford, Nelson, Haverhill, Mass., assignor to W. A. Ives & Co., New Haven, Conn. Brace for bits .....	May 7, 1878	307	88	13	862
210, 573	Spooner, Thomas. (See Fairbanks & Spooner.) .....					
	Spooner, William Henry, Portsmouth, Va. Reefing and furling sails .....	Dec. 3, 1878	204	54	14	850
210, 161	Sprague, Austin V. M., et al. (See Burbank, Abner, assignor.) .....					
210, 574	Sprague, Austin V. M., Rochester, N. Y. Razor-strop .....	Nov. 19, 1878	687	204	14	780
	Sprague, Chauncey A., and John W. Clardy, Weaver's Station, Ala. Cotton chopper and rake .....	Dec. 3, 1878	205	54	14	850
210, 059	Sprague, Edwin, Pittsburg, Pa. Valve-gear for engine .....	Nov. 19, 1878	577	173	14	766
199, 474	Sprague, George, Rockford, Iowa. Rotary churn-dasher .....	Jan. 42, 1878	783	230	13	146
8, 461	Sprague, Harvey, Churchville, N. Y. Carriage-spring .....	Oct. 22, 1878	946	276	14	632
	Sprague, Joseph W. (See Wells & Sprague.) .....					
203, 665	Sprague, Joseph W., Jeffersonville, Ind. Freight-car truck .....	May 14, 1878	462	132	13	891
201, 298	Sprague, Rufus F., Greenville, Mich. Crosscut-saw handle .....	Mar. 12, 1878	490	150	13	494
	Sprague, S. H., et al. (See Westinghouse, George, jr., assignor.) .....					
8, 184	Sprague, Solon Smith. (See Prouty & Smith.) .....					
	Sprague, Watson N., South Framingham, Mass., assignor to self and William W. Pot- ter. Manufacture of stiffeners for boots and shoes .....	Apr. 16, 1878	840	242	13	721
206, 364	Sprague, Welcome, assignor of one-half interest to Erie Preserving Company, Buffalo, N. Y. Green-corn knife .....	July 23, 1878	1032	296	14	151
200, 098	Sprague, William, Philadelphia, Pa. Piston .....	Feb. 5, 1878	208	65	13	265
202, 479	Sprecher, Nathan N., and Isaac B. Keller, Reading, Pa. Shirt-scale .....	Apr. 16, 1878	661	194	13	701
200, 805	Spreen, Henry C., et al. (See Stewart, Edward, assignor.) .....					
	Sprengard, Jacob, Cincinnati, Ohio. Cradle .....	Feb. 26, 1878	953	280	13	403
	Sprengle, L. Jeff. (See Brubaker, Andrew, assignor.) .....					
	Sprengle, Abraham B., et al. (See Donnelly, Charles J., assignor.) .....					
205, 006	Sprengle, Peter B., et al. (See Donnelly, Charles J., assignor.) .....					
	Spring, Charles, and John T. Robinson, Hyde Park, Mass. Bracket-saw frame .....	June 18, 1878	629	185	13	1102
203, 207	Spring, John M. (See Summers, Lucius P., assignor.) .....					
	Springer, Henry, Vicksburg, Mich. Seed-drill teeth .....	Apr. 30, 1878	1459	427	13	813
	Springer, Henry J. (See Gillespie & Springer.) .....					
199, 871	Springer, Jason, San Francisco, Cal. Manufacture of doors, &c .....	Jan. 29, 1878	1201	353	13	219
211, 062	Springer, Theodore, New York, N. Y. Air-compressing apparatus .....	Dec. 17, 1878	778	214	14	939
208, 646	Springer, Theodore G., New York, N. Y. Lamp-burner .....	Oct. 1, 1878	195	56	14	515
	Springfield Glazed Paper Company. (See Marsh, John F., assignor.) .....					
199, 324	Sproat, John, Cairo, Ill. Non-conducting casing for refrigerators, &c .....	Jan. 15, 1878	628	182	13	114
206, 840	Same .....	Aug. 6, 1878	189	60	14	230
208, 996	Sprout, A. Rensselaer, Picture Rocks, Pa. Machine for dipping matches .....	Oct. 15, 1878	595	173	14	579
200, 046	Sprout, Ariel B., Hughesville, assignor of one-half interest to George T. Paull, Blairs- ville, Pa. Fence-post .....	Mar. 5, 1878	123	41	13	434
200, 003	Sproles, John W., Philadelphia, Pa. Paper box for packing hatchets .....	Feb. 5, 1878	108	36	13	250
208, 770	Spruce, James, assignor to Scoville Manufacturing Company, Waterbury, Conn. Spring-hinge .....	Oct. 8, 1878	337	97	14	541
	Squier, George L. (See Stevens, Henry B., assignor.) .....					
201, 565	Squire, Feargus B., Cleveland, Ohio. Lamp .....	Mar. 19, 1878	780	237	13	541
207, 217	Squire, John J., assignor to L. M. and Moses Rumsey, Saint Louis, Mo. Horse hay- rake .....	Aug. 20, 1878	593	178	14	288
203, 857	Squire, Wilbur J., East Haddam, Conn. Machine for making netting .....	May 21, 1878	675	191	13	924
200, 581	Squires, Henry G., Pittsburg, Pa. Inkstand .....	Feb. 19, 1878	708	208	13	358
210, 721	Squires, Rowin S., and Frank Kaiser, Kansas City, Mo. Baling-press .....	Dec. 10, 1878	368	101	14	880
206, 080	Squires, Sidney, Boston, Mass. Sofa-bed .....	Aug. 13, 1878	341	105	14	252
201, 896	Stacey, Henry, Indianapolis, Ind. Fire-escape .....	Apr. 2, 1878	38	10	13	604
207, 315	Stack, William, Oakland, Cal. Device for driving nails under water .....	Aug. 20, 1878	692	206	14	390
	Stackli, John. (See Staufenheil & Stackli.) .....					
205, 921	Stafford, Daniel R. (See Spedden & Stafford.) .....					
205, 768	Stafford, George, Washington, D. C. Velocipede .....	July 9, 1878	508	144	14	77
209, 302	Stafford, Marshall B., New York, N. Y. Car-axle box .....	July 9, 1878	342	99	14	56
205, 920	Same .....	Oct. 22, 1878	933	272	14	630
	Stabler, Charles F., Shiversville, Pa. Post-boring machine .....	July 9, 1878	507	144	14	77
203, 955	Stahn, Rudolph A., South Stillwater, Minn. Shingle-press .....	May 21, 1878	783	224	13	939

*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
210, 474	Staib, Henry, Blossburg, Pa. Leather-finishing machine.	Dec. 3, 1878	87	22	14	835
210, 815	Stallard, David, jr., New Liberty, Ky. Barrel-hoop stretcher.	Dec. 10, 1878	465	130	14	893
204, 172	Stallman, Granville H., assignor of one-half interest to Matthew Braam, Cincinnati, Ohio. Inlet-pipe for street-sprinklers.	May 28, 1878	1031	204	13	974
201, 461	St. Amant, Francis, Boston, Mass. Piano-forte action.	Mar. 10, 1878	671	205	13	527
203, 209	Stambaugh, David F., Casey, Ill. Carpet-fastener.	Apr. 30, 1878	1461	427	13	813
199, 325	Stamour, John B., Philadelphia, assignor to George W. Selsor, Germantown, Pa. Sad-iron.	Jan. 15, 1878	629	163	13	114
208, 997	Stamour, John B., assignor of one-half interest to James Smith & Co., Philadelphia, Pa. Mold for casting temple-rollers.	Oct. 15, 1878	596	173	14	579
209, 101	Stamour, John B., Philadelphia, Pa. Loom-temple.	Oct. 15, 1878	714	207	14	595
204, 173	Standing, William, De Soto, Ill. Steam-superheater.	May 28, 1878	1032	204	13	974
203, 954	Standish, George E., and Luther S. Bailey, Middleborough, Mass. Harness-saddle.	May 21, 1878	762	224	13	939
	Standish, L. F. (See Tyler, Chandler & Standish) (Reissue.)					
	Stanfield, John. (See Clark & Stanfield.)					
	Stanfield, Mark M. (See Wood, George W., assignor.)					
200, 099	Stangard, Hans H. (See Kaiser & Stangard.)					
200, 100	Stanley, Elbridge G., Fitchburg, Mass. Curtain-fixture.	Feb. 5, 1878	209	65	13	265
200, 303	Same. Folding chair.	Feb. 5, 1878	210	66	13	266
201, 566	Stanley, Elijah, Albion, Iowa. Fence-post.	Oct. 22, 1878	934	272	14	630
201, 130	Stanley, James, Newark, N. J. Bridle-bit.	Mar. 19, 1878	781	238	13	542
200, 199	Stanley, James C., New Hartford, Conn. Spinning-machine.	Mar. 12, 1878	315	96, 97	13	469
207, 001	Same. Spinning-spindle.	Oct. 23, 1878	835	241	14	616
202, 883	Stanley, James D., Wilmington, N. C. Cotton-press.	Sept. 10, 1878	437	131	14	408
202, 127	Stannard, Gaylord S., assignor to Sherman S. Jewett & Co., Buffalo, N. Y. Stove-bot- tom.	Apr. 23, 1878	1122	322	13	765
204, 104	Stannard, Monroe, and John R. Reynolds, Hartford, Conn. Piston water-meter.	Apr. 9, 1878	288	85	13	644
204, 171	Stansel, Menzo, Yorkville, Ill. Bed-bottom.	May 21, 1878	939	268	13	958
202, 067	Stansifer, John M., Union, Ky. Ring for preventing hogs from rooting.	May 28, 1878	1030	203	13	974
202, 068	Stanton, John W., Brooklyn, N. Y. Apparatus for extinguishing fires.	Apr. 2, 1878	205	60	13	628
203, 564	Same. Fire-extinguisher.	Apr. 2, 1878	207	60, 61	13	629
204, 857	Same. Apparatus for extinguishing fires.	May 14, 1878	308	104	13	879
203, 603	Stanton, John W., Philadelphia, Pa. Fountain-pen.	June 11, 1878	455	133	13	1076
203, 903	Stanton, Patrick J., and Joseph Hutchinson, Chicago, Ill. Furnace.	May 14, 1878	403	132	13	891
203, 903	Stanton, Spencer R., Oxford, Mich. Cultivator.	Aug. 13, 1878	272	83	14	243
8, 452	Stanton, William, assignor of one-half interest to William H. Whitehead, Erie, Pa. } Device for unloading grain from ships. (Reissue.)	Oct. 15, 1878	720	208 } 209 }	14	596
200, 199	Stanwood, Thomas J., and Gustavus W. Parker, Brunswick, Me. Vehicle-wheel hub.	July 23, 1878	841	240	14	127
201, 460	Stanyan, John M., Milford, N. H. Dough-mixer.	Mar. 19, 1878	670	204	13	526
202, 069	Staples, David T., Galt's Mills, Va. Millstone-driver.	Apr. 2, 1878	209	61	13	628
202, 827	Starbuck, George H., Troy, N. Y. Siphon-condenser.	Sept. 10, 1878	257	80	14	385
201, 259	Starbuck, Theodore, and Charles Patrick Small, Savannah, Ga. Sewer-trap.	Mar. 12, 1878	491	151	13	494
198, 860	Starck, Ludwig, Mayence, Germany. Machine-beltting.	Jan. 1, 1878	139	39	13	20
8, 161	Stark, Andrew, Topeka, Kans. Wardrobe-bedstead. (Reissue.)	Apr. 9, 1878	495	145	13	673
203, 789	Stark, Arthur M., et al. (See Marsh & Bergqvist, assignors.)					
	Stark, Benjamin F., West Newton, Pa. Caster-frame for sewing-machines.	May 14, 1878	594	166	13	907
201, 845	Stark, G. H. (See Webster, Eugene A., assignor.)					
202, 882	Stark, George W., Wenona, assignor to self and David G. Arnold, West Bay City, Mich. Pail and tub car.	Mar. 26, 1878	1073	326	13	588
204, 458	Starkenber, Felix, assignor of one-half interest to Adolph Pfeiffer, Neenah, Wis. Rotary engine.	Apr. 23, 1878	1121	322	13	765
200, 101	Starkey, Dexter, assignor of two-thirds interest to Rufus W. Wheelock and George B. Trickey, Lawrence, Mass. Device for hitching horses.	June 4, 1878	42	14	13	1018
201, 564	Starkey, Eliza. (See Starkey, William, assignor.)					
204, 630	Starkey, Joseph. (See Starkey & Jackson, assignors.)					
200, 430	Starkey, William, assignor of one-eighth interest to Thomas Glaze, Pittsburg, Pa. Vise.	Feb. 5, 1878	211	66	13	266
204, 630	Starkey, William, assignor of one-fourth interest to Eliza Starkey, Pittsburg, Pa. Egg-cup.	Mar. 10, 1878	570	177	13	513
200, 430	Starkey, William, and Oliver P. Jackson, assignor of one-fourth interest to Joseph Starkey, Pittsburg, Pa. Indicator and gage-cock.	June 4, 1878	207	66	13	1042
199, 477	Starkweather, Derosa A. H., Greenville, Mich. Machine for sawing laths.	Oct. 29, 1878	1075	312	14	654
203, 297	Starr, Eli T., assignor to Samuel S. White, Philadelphia, Pa. Rocking standard for dental engines.	Jan. 22, 1878	786	231	13	147
203, 298	Same. Dental-engine hand-piece.	May 7, 1878	65	20	13	829
203, 858	Same. Dental tool.	May 7, 1878	66	20	13	829
207, 079	Same. Abrading tool for dental purposes.	May 21, 1878	677	192	13	925
207, 316	Same. Head-rest for dental chairs.	Aug. 13, 1878	435	135	14	263
210, 366	Same. Head-rest for dental chairs.	Aug. 20, 1878	693	207	14	300
202, 765	Same. Dental chair.	Nov. 26, 1878	925	270 } 271 }	14	815
208, 545	Starr, John F., jr., Camden, N. J. Louver-ventilator.	Apr. 23, 1878	993	285	13	749
201, 565	Starr, Peter, Danbury, Conn. Feeder for hat-forming machines.	Oct. 1, 1878	88	26	14	501
202, 201	Starr, David J., Thomaston, Me. Hand bay-rake.	Mar. 19, 1878	576	177	13	513
203, 210	Staufenbeil, Charles T., and John Staehli, San Francisco, Cal. Horse-collar.	Apr. 9, 1878	366	107	13	656
210, 975	Stauffer, Christian M., Berne, Ind. Device for teaching music.	Apr. 30, 1878	1462	427	13	813
202, 383	Stauffer, Samuel D., Marietta, Pa. Combined stroker and handle in measures.	Dec. 17, 1878	665	183	14	926
200, 780	Staver, George W., Monroe, Wis. Riding corn-cultivator.	Apr. 16, 1878	570	167	13	687
	Same. Cultivator.	Nov. 12, 1878	272	81	14	721
201, 063	Staylor, Henry M., et al. (See Craig, George W., assignor.)					
207, 828	St. Clair, Harry L., Vineland, assignor to self and Stephen Leach, Malaga, N. J. Wash-board.	Mar. 5, 1878	242	77	13	452
200, 935	Stead, Isaac, and Samuel H. Bayley, Philadelphia, Pa. Gas-generating burner.	Sept. 10, 1878	259	81	14	385
203, 565	Stead, Isaac, Philadelphia, Pa. Air-vent for street-lamp reservoir.	Nov. 12, 1878	433	131	14	742
205, 813	Stead, James C., Brooklyn, N. Y. Combined check and slide valve.	May 14, 1878	369	104	13	879
207, 779	Stead, James C., Green Point, N. Y. Feed-water heater.	July 9, 1878	395	113	14	63
207, 780	Same. Feed-water heater and circulator for steam-boilers.	Sept. 3, 1878	107	60	14	374
200, 497	Same. Feed-water heater and circulator for steam-boilers.	Sept. 3, 1878	198	61	14	374
8, 289	Stearns, Charles E., Boston, Mass., assignor to William B. Gould, New York, N. Y. Stair-rod securer.	July 30, 1878	1196	343	14	175
100, 067	Stearns, Edward H., assignor to Stearns Manufacturing Company, Erie, Pa. Head- block for saw-mills. (Reissue.)	June 18, 1878	794	235 } 236 }	13	1125
	Stearns, Edward H., Erie, Pa. Head-block for saw-mills.	Jan. 29, 1878	1012	295	13	190
	Stearns, George C. (See Chandler, Henry, assignor.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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205, 218	Stearns, George F., Forestville, assignor to self and Richard J. Allyn, Hartford, Conn. Auger	June 25, 1878	860	254	13	1128
201, 064	Stearns, George N., Syracuse, N. Y. Hollow auger	Mar. 5, 1878	242	77	13	452
203, 384	Same..... same	May 7, 1878	156	45	13	841
202, 480	Stearns, Henry A., Pawtucket, R. I. Machine for folding cotton-batting	Apr. 16, 1878	662	194	13	701
206, 841	Same..... Cotton batting or wadding, and machine for folding the same	Aug. 6, 1878	189	60	14	230
210, 642	Stearns, Henry A., assignor to Stephen A. Jenks, Pawtucket, R. I. Railway safety-gate	Dec. 10, 1878	286	78, 79	14	870
	Stearns Manufacturing Company. (See Cain John, assignor.) (Reissue.)					
	Same..... (See Stearns, Edward H., assignor.) (Reissue.)					
200, 947	Stearns, William Ellison, assignor to self and Julia M. Smith, Rutland, Vt. Wire cutting and bending machine	Mar. 5, 1878	124	41	13	434
	Stearns, William R., et al. (See Merritt, Henry W., assignor.)					
200, 487	Stearns, Emily A., Brooklyn, N. Y. Household-press for fruits, &c	Feb. 19, 1878	615	181	13	344
203, 385	Stebbins, Julius M., New York, N. Y. Dental engine	May 7, 1878	157	45	13	842
203, 667	Same..... Dental plugger	May 14, 1878	465	132	13	891
	Stebbins, Martin L. (See Hopkins & Stebbins.)					
204, 390	Stedler, Henry, jr., assignor to self and Richard Frotcher, Iberia, La. Corn-planter	May 28, 1878	1256	358	13	1002
	Stedman & Morse. (See Hebard, Albert K., assignor.)					
	Steel, Alexander. (See Tappy & Steel.)					
205, 814	Steel, Arthur R., assignor to self and Laura Van Horn, Letts, Iowa. Motor	July 9, 1878	396	113	14	63
208, 861	Steel, Robert, Philadelphia, Pa. Velocipede	Oct. 8, 1878	440	127	14	555
203, 312	Steele, Alden P., assignor of one-half interest to Robbins & Myers, Springfield, Ohio. Seeding-machine	June 25, 1878	959	284	13	1151
	Steele, Charles R., et al. (See Spencer, Archelus E., assignor.)					
	Steele, D. F., et al. (See Truesdell, Lewis W., assignor.)					
207, 781	Steele, David, New Britain, assignor to Sargent & Co., New Haven, Conn. Tool-handle	Sept. 3, 1878	200	61	14	374
200, 102	Steele, Jonathan W., Chicago, Ill. Culinary utensil	Feb. 5, 1878	212	60	13	266
199, 591	Steele, William, Moffatt's Creek, Va. Feed-regulator for millstones	Jan. 22, 1878	906	265	13	166
201, 847	Steele, William M., Philadelphia, Pa. Spindle-step for spinning-machine	Mar. 26, 1878	1074	327	13	589
202, 292	Steen, John G., assignor to Seyfert, McManus & Co., Reading, Pa. Hydraulic press	Apr. 9, 1878	458	134	13	608
	Steers & Co., S. B. (See Morse, Edmund L., assignor.)					
201, 462	Steffany, Francis, Brooklyn, N. Y. Pendant for watches	Mar. 19, 1878	672	205	13	527
200, 674	Stege, Edward R., Chicago, Ill. Apparatus for supplying steam-blast to boiler-furnaces	Feb. 26, 1878	823	242	13	383
199, 755	Stehley, William M., King William Court-House, Va. Harrow and roller combined	Jan. 29, 1878	1091	320	13	202
207, 218	Stehley, William M., King William Court-House, assignor to self and John S. McCallmont, Franklin, Pa. Elastic armor for ships	Aug. 20, 1878	594	179	14	288
202, 600	Stein, Michael J., New York, N. Y. Meat-chopper	Apr. 16, 1878	801	231	13	716
202, 598	Stein, William H., Garnett, Kans. Washing-machine	Apr. 16, 1878	800	231	13	716
	Steinau, Charles. (See Steinau, Richard and Charles.)					
206, 635	Steinau, Richard and Charles, Brunswick, Germany. Preparation of peroxide of iron	July 30, 1878	1333	.....	14	192
	Steinborn & Huppelsberg. (See Huppelsberg, Friedrich W., assignor.)					
207, 690	Steinboffer, Otto, Baltimore, Md. Curtain-fixture	Sept. 3, 1878	106	32	14	362
199, 333	Steinboff, Herman C., Weehawken, N. J. Door-spring	Jan. 22, 1878	696	204	13	132
211, 003	Steinmann, Charles, assignor of one-half interest to Jacob Kienle, Cincinnati, Ohio. Apparatus for handling hides	Dec. 17, 1878	780	214	14	939
210, 163	Steinmetz, Conrad Philipp, Prairie du Chien, Wis. Potato-bug catcher	Nov. 19, 1878	689	205	14	781
208, 647	Steinmetz, William G., Brooklyn, N. Y. Bottle-stopper	Oct. 1, 1878	196	56	14	515
204, 106	Steinway, Christian F. Theodor, New York, N. Y. Grand piano-forte	May 21, 1878	941	269	13	958
204, 107	Same..... Piano-forte action	May 21, 1878	942	269	13	959
204, 108	Same..... Piano-forte	May 21, 1878	943	270	13	959
204, 109	Same..... Piano-forte agraffe	May 21, 1878	944	270	13	959
204, 110	Same..... Sounding-board for piano-fortes	May 21, 1878	945	270	13	959
204, 111	Same..... Capodastro-frame for piano-fortes	May 21, 1878	946	271	13	959
205, 690	Steinway, Christian F. Theodor, assignor to self and William Steinway, New York, N. Y. Piano-forte repeating-action	July 2, 1878	250	74, 75	14	40
	Steinway, William. (See Steinway, Christian F. T., assignor.)					
198, 861	Stelle, E. T., et al. (See Stockbridge, Lyman R., assignor.) (Reissue.)					
203, 668	Steller, Charles B., Milwaukee, Wis. Sash-fastener	Jan. 1, 1878	139	40	13	30
200, 634	Same..... Colter	May 14, 1878	465	133	13	891
206, 636	Same..... Sash-holder	July 30, 1878	1332	383	14	192
203, 790	Same..... Sash-fastener	July 30, 1878	1333	383	14	193
205, 313	Stempel, Omar A., Chamois, Mo. Composition for preserving eggs	May 14, 1878	505	.....	13	907
202, 864	Same..... Process of treating preserved eggs	June 25, 1878	962	.....	13	1151
190, 117	Stenberg, Oscar, Helsingfors, Finland, Russia, assignor to Julius Blancke, Merseburg, Germany. Rotary engine	Apr. 23, 1878	1123	322	13	765
201, 567	Stengel, Charles, Hamilton, Ohio. Dovetailing-machine	Jan. 8, 1878	408	120	13	79
200, 304	Stengel, Jost, Big Rapids, Mich. Fire-escape	Mar. 19, 1878	782	238	13	542
203, 434	Stephan, John Alfred, Worcester, England. Manufacturing gas	Oct. 22, 1878	934	.....	14	630
8, 233	Stephens, Benjamin F., Brooklyn, N. Y. Hand-vise	June 25, 1878	1082	321	13	1167
198, 755	Stephens, Clements T., Ithaca, N. Y. Meat-tenderer	May 14, 1878	626	174	13	910
	Same..... same	Jan. 1, 1878	27	7	13	13
	Stephens, James, et al. (See Crawford, John, assignor.)					
200, 629	Stephens, James A., assignor of one-half interest to Thomas Tennant, Metz, Iowa. Draft-equalizer	Feb. 26, 1878	772	227	13	376
206, 904	Stephens, John A., and Jules Lemeroux, Kanonic, La. Lamp	Aug. 13, 1878	273	83	14	244
208, 344	Stephens, John Alexander, Lecomte, La. Balanced steam-valve	Sept. 24, 1878	838	244	14	467
	Stephens, Joseph M. (See Nicholson, William H., assignor.)					
	Stephens, Samuel. (See Tolley, Frederick W., assignor.)					
207, 317	Stephenson, Frederick G., Plainville, Conn. Automatic lamp-lighting device	Aug. 20, 1878	694	207	14	300
200, 620	Stephenson, Frederick G., assignor of one-half interest to Thomas B. Stephenson, Plainville, Conn. Lamp-lighter	Nov. 5, 1878	102	30	14	694
207, 829	Stephenson, James A., El Paso, Ill. Hedge-trimmer	Sept. 10, 1878	260	81	14	385
8, 084	Stephenson, John, New York, N. Y. Car-axle box	Feb. 19, 1878	724	213	13	360
8, 085	Same..... same	Feb. 19, 1878	725	213	13	360
8, 086	Same..... same	Feb. 19, 1878	726	213	13	360
8, 087	Same..... same	Feb. 19, 1878	728	213	13	361
	Stephenson, Thomas B. (See Stephenson, Frederick G., assignor.)					
208, 434	Sterick, Charles Wesley, Decatur, Ga. Steam-cooker	Sept. 24, 1878	931	273	14	479
203, 660	Sterick, Sylvester T. F., Georgetown, D. C., assignor to Joseph H. Wiggen, South New Market, N. H. Vehicle-wheel hub	May 14, 1878	466	133	13	891



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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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8, 403	Sterling, Charles A., New York, N. Y., assignor, by mesne assignments, to George Turner. Fluting-machine..... (Reissue.)	Sept. 10, 1878	456	137	14	410
	Sterling, Ezra J. (See Cranston, Charles, assignor.)					
	Sterling, Joseph A. (See Plumb, William H., assignor.)					
	Stern, Edward. (See Du Motay & Stern.)					
210, 367	Stern, John, and William Meyn, assignors of one-third interest to Edward W. Stoddard, Detroit, Mich. Sheet-metal elbow.....	Nov. 26, 1878	928	271	14	815
210, 722	Sternberg, Elias G., Depauville, N. Y. Ventilator.....	Dec. 10, 1878	369	101	14	860
203, 791	Sternberger, Leopold, Philadelphia, Pa. Treadle apparatus for applying power to sewing-machines.....	May 14, 1878	596	166	13	907
199, 872	Sterzing, Emil, assignor of one-half interest to Joseph A. Mongovan, Parkville, Conn. Automatic animal-feeding device.....	Jan. 29, 1878	1202	353	13	219
8, 165	Stetefeldt, Charles, assignor, by mesne assignments, to Stetefeldt Furnace Company, San Francisco, Cal. Furnace for roasting pulverized ores..... (Reissue.)	Apr. 9, 1878	501	146	13	674
8, 266	Stetefeldt, Charles, San Francisco, Cal., assignor, by mesne assignments, to Stetefeldt Furnace Company. Ore-roasting furnace..... (Reissue.)	May 28, 1878	1300	370	13	1008
	Stetefeldt Furnace Company. (See Stetefeldt, Charles, assignor.)..... (Reissue.)					
203, 956	Stetson, George Ripley, assignor to self and Morse Twist Drill and Machine Company, New Bedford, Mass. Screw-cutting die.....	May 21, 1878	783	224	13	009
206, 496	Stetson, William Wallace, Henry, Ill. Pump.....	July 30, 1878	1195	343	14	175
205, 314	Steuber, Mary M., Philadelphia, Pa. Doll.....	June 25, 1878	962	285	13	1151
209, 524	Steutermann, John C., assignor to A. D. Puffer & Sons, Boston, Mass. Air-forcing engine.....	Oct. 29, 1878	1175	341	14	068
210, 219	Stevens, Charles H., Chicago, Ill. Horse-collar.....	Nov. 26, 1878	765	227	14	794
206, 905	Stevens, Charles V., assignor of four-fifths interest to John Clark and Harrison Wright, Somonauk, Ill. Grinding-mill attachment.....	Aug. 13, 1878	274	83	14	244
201, 713	Stevens, David A., Toledo, Ohio. Refrigerator.....	Mar. 26, 1878	895	287	13	569
204, 105	Stevens, David E., Newark, Ohio. Bottle-stopper.....	May 21, 1878	940	269	13	958
	Stevens, Edward D. (See Horrocks & Stevens.)					
209, 937	Stevens, Francis B., Hoboken, N. J. Boiler-covering.....	Nov. 12, 1878	435	131	14	743
198, 756	Stevens, Franklin B., and Joseph L. Bond, Port Huron, Mich. Hydrant-valve.....	Jan. 1, 1878	28	7	13	13
205, 982	Stevens, Frank M., Concord, N. H. Rotary valve.....	July 16, 1878	588	169	14	92
	Stevens, Frederic E. (See Buzzell, George H., assignor.)					
	Stevens, Frederick, et al. (See Havell, George, assignor.)..... (Reissue.)					
208, 435	Stevens, George D., East Orange, N. J. Buttoner.....	Sept. 24, 1878	932	273	14	479
210, 816	Same. Chetelaine.....	Dec. 10, 1878	465	131	14	893
200, 228	Stevens, George I., Brooklyn, assignor to Averill Paint Company, New York, N. Y. Distemper paint.....	Feb. 12, 1878	344	.....	13	294
	Stevens, George W. (See Stevens, John L. and George W.)..... (Reissue.)					
	Stevens, Henry. (See Williamson, Kelly M., assignor.)					
199, 233	Stevens, Henry B., assignor to George L. Squier, Buffalo, N. Y. Grain-separator.....	Jan. 15, 1878	523	{ 157 } 158	{ 13 } 13	99
202, 203	Same. Thrashing-machine.....	Apr. 9, 1878	459	134	13	668
210, 817	Same. Coffee-separator.....	Dec. 10, 1878	466	131	14	893
200, 354	Stevens, James W., Roundhead, Iowa. Lifting-jack.....	Feb. 12, 1878	476	140	13	314
205, 435	Stevens, Jerome B., Detroit, Mich. Shoe.....	June 25, 1878	1084	321	13	1167
203, 670	Stevens, John, Port Byron, N. Y. Die for pressing paper vessels, &c.....	May 14, 1878	468	133	13	891
209, 991	Stevens, John, and Ellis Moore, Coatesville, Mo. Device for roasting coffee.....	Nov. 10, 1878	504	153	14	756
	Stevens, John C. (See Franz & Stevens.)					
199, 326	Stevens, John H., Cambridge, Mass. Water-closet.....	Jan. 15, 1878	630	183	13	114
8, 091	Stevens, John L. and George W., San Francisco, Cal., assignor, by mesne assignments, to Charles E. Coburn and Harriet F. Billings, Chicago, Ill. Case for transporting eggs..... (Reissue.)	Feb. 19, 1878	733	215	13	362
200, 103	Stevens, John L., assignor to Nicholas Schroder and Henry C. Seavers, New York, N. Y. Cell-case.....	Feb. 5, 1878	213	66	13	206
201, 508	Same. Egg-carrier.....	Mar. 10, 1878	782	238	13	542
203, 506	Stevens, John N., Toledo, Ohio. Water-filter.....	May 14, 1878	370	104	13	879
	Stevens, J. T., et al. (See Cornell & Tollner, assignors.)					
	Stevens, L. H., et al. (See Cornell & Tollner, assignors.)					
199, 234	Stevens, Moody A., Cohasset, Mass. Railway-signal.....	Jan. 15, 1878	535	158	13	90
201, 463	Same. Camp-bed.....	Mar. 10, 1878	672	205	13	527
	Stevens, W. D. (See Dunbar, John, assignor.)					
202, 599	Stevens, Wellington D., Springfield, Mass. Window-screen.....	Apr. 16, 1878	801	231	13	716
206, 842	Stevens, William, assignor of one-half interest to Isaac Richards, Philadelphia, Pa. Hatchway-door mechanism.....	Aug. 6, 1878	190	60	14	230
208, 499	Stevens, William J., New York, N. Y. Bung.....	Oct. 1, 1878	45	14	14	495
209, 142	Stevens, William K., East Brookfield, Mass. Vise.....	Oct. 22, 1878	778	226	14	600
	Stevens, William L. (See Stitt, Ransom, assignor.)					
	Stevenson, Charles A. (See Schurbeck & Stevenson.)					
	Stevenson, Charles H. (See Nye, Charles H., assignor.)					
207, 219	Stevenson, Clinton, Southwest Oswego, N. Y. Hay-rack.....	Aug. 20, 1878	594	179	14	288
8, 287	Stevenson, Elisha McCurdy, Pulaaki, Pa., assignor to John Irwin. Petroleum-well..... (Reissue.)	June 18, 1878	791	235	13	1124
200, 355	Stevenson, George, Zionsville, Ind. Pulverizing-cultivator.....	Feb. 12, 1878	477	140	13	314
204, 631	Stevenson, James W., Richmond, Ind. Gate.....	June 4, 1878	208	60	13	1042
202, 885	Stevenson, Thomas F., Brooklyn, N. Y. Door-chain.....	Apr. 23, 1878	1124	323	13	765
207, 080	Stevenson, William G., Meriden, Miss. Rice-hulling machine.....	Aug. 13, 1878	436	135	14	263
199, 592	Stever, Jeremiah, assignor of one-half interest to D. S. Brinsmade, Birmingham, Conn. Burnishing-machine.....	Jan. 22, 1878	907	{ 285 } 266	{ 13 } 13	166
202, 294	Stevens, Shepherd W., New Bedford, Mass. Combined dining and laundry table.....	Apr. 9, 1878	461	135	13	668
	Steward, Fred. S., et al. (See Rogers & Tuttle, assignors.)					
199, 593	Stewart, Archibald, Keota, Iowa. Feed-cooker.....	Jan. 22, 1878	909	296	13	166
	Stewart, Arch. V. (See Van Kannel, Theophilus, assignor.)					
207, 454	Stewart, Aurelius, assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Sewing-machine.....	Aug. 27, 1878	853	252	14	325
203, 299	Stewart, Benjamin F., New Philadelphia, Ohio. Permutation-lock.....	May 7, 1878	68	21	13	829
	Stewart, Daniel. (See Brown, Jonathan, assignor.)					
251, 846	Stewart, Edward, assignor to self, Henry C. Spreen, and William Heising, Madison, Iowa. Beer-pump.....	Mar. 26, 1878	1073	{ 326 } 327	{ 13 } 13	588
206, 981	Stewart, Edward, assignor of one-half interest to Samuel Atlee and Jacob C. Blackburn, Fort Madison, Iowa. Time-lock.....	Aug. 13, 1878	341	105	14	232
	Stewart & Fain. (See Lester, James S., assignor.)					
202, 205	Stewart, Francis L., Murrysville, Pa. Compound for defecating saccharine liquids.....	Apr. 9, 1878	462	.....	13	668
203, 507	Same. Clarifying the juices of sorghum and maize.....	May 7, 1878	281	.....	13	859
	Stewart, Francis M. (See Moses & Stewart.)					

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
202, 200	Stewart, George E., County Line, Mich. Ditching-machine .....	Apr. 9, 1878	365	107	13	654
210, 818	Stewart, James, and John W. Jones, Schooley's Station, Ohio. Corn-harvester .....	Dec. 10, 1878	468	131 132	14	893
202, 671	Stewart, James Monroe, Franklin, Mass. Game apparatus .....	May 14, 1878	469	133	13	891
204, 773	Stewart, James O., Georgetown, Colo. Process for amalgamating chloridized ores .....	June 11, 1878	367	110	13	1065
210, 723	Stewart, John F., Plano, Ill. Grain-binder .....	Dec. 10, 1878	370	101	14	880
210, 575	Stewart, Joseph G. (See Conner, Samuel, assignor.)					
199, 873	Stewart, Lyman, Titusville, Pa. Anchor for oil-well packer .....	Dec. 3, 1878	206	54	14	850
210, 810	Stewart, Milton. (See McFarland, John D., assignor.)					
199, 873	Stewart, Richard M., Americus, Ga. Turbine water-wheel .....	Jan. 29, 1878	1202	353	13	210
210, 810	Stewart, Samuel, Landisburg, Pa. Manufacture of fly-nets for horses .....	Dec. 10, 1878	469	132	14	893
209, 143	Stewart, Samuel D. (See Maranville, Harvey, assignor.)					
	Stewart, Sylvester N., Philadelphia, Pa. Water-mill .....	Oct. 22, 1878	778	226	14	600
	Stewart, Thomas M. (See Rac, John, assignor.)					
	Stewart, William. (See Spencer, Allen D., assignor.)					
200, 880	Stewart, William, Hartford, Conn. Knob attachment .....	Mar. 5, 1878	65	23	13	425
199, 478	Stewart, William A., Big Rapids, Mich. Feather-renovator .....	Jan. 22, 1878	787	231	13	147
209, 936	Stewart, William H., Butler, Mo. Kitchen-cabinet .....	Nov. 12, 1878	434	131	14	742
200, 356	Stewart, William J., Russell, Iowa. Washing-machine .....	Feb. 12, 1878	477	141	13	314
205, 698	Stewart, William J., Saint Louis, Mo. Sewing-machine .....	July 2, 1878	252	75	14	40
205, 200	Stewart, William W., Brooklyn, N. Y. Fountain-pen holder .....	July 23, 1878	841	240	14	127
207, 318	Same.....Fountain-pen .....	Aug. 20, 1878	695	207	14	301
208, 273	Same.....Syringe, or liquid-dropper .....	Sept. 24, 1878	706	224	14	458
201, 065	Stigleman, George W., Richmond, Ind. Preparation of photographic negatives .....	Mar. 5, 1878	243	77	13	452
202, 296	Stiles, Charles W. (See Hill, George C., assignor.)					
202, 207	Stiles, David L., Rochester, N. Y. Stove door and window .....	Apr. 9, 1878	463	135	13	668
203, 211	Same.....Stove .....	Apr. 9, 1878	463	136	13	660
	Still, Philip B., Woodstock, Ill. Corn and pumpkin planter .....	Apr. 30, 1878	1463	428	13	813
199, 118	Stillman, George G. (See Grigg, Thomas H., assignor.)					
8, 357	Stillman, Oscar B., and John H. Webster, Boston, Mass. Measuring and discharging apparatus for cooling-tubes of char-furnace .....	Jan. 8, 1878	410	121	13	80
206, 637	Stilwell, Charles B., Worcester, Mass., assignor, by mesne assignments, to Alfred Adams, Cleveland, Ohio, and Byron B. Taggart, Watertown, N. Y. Paper-bag machine .....	July 30, 1878	1366	392 393	14	197
	Stilwell, Charles B., Worcester, Mass., assignor to Alfred Adams, Cleveland, Ohio, and Byron B. Taggart, Watertown, N. Y. Paper-tube machine .....	July 30, 1878	1334	383	14	193
206, 638	Same.....Machinery for making satchel-bottom paper bags .....	July 30, 1878	1337	384 385 386	14	193
201, 066	Stilwell, Rinaldo H., Stockton, N. J. Pail and combined hoop and ear .....	Mar. 5, 1878	244	77	13	432
209, 431	Stimmell, John, Columbus, Ohio. Wheat-cultivator .....	Oct. 29, 1878	1077	312	14	654
199, 874	Stimson, Alfred A., Rockport, assignor to self and J. J. Mills, Chelsea, Mass. Anchor .....	Jan. 29, 1878	1203	353	13	219
205, 510	Stinde, Herman F., Steeleville, Ill. Millstone-ventilator .....	July 2, 1878	48	15	14	15
201, 464	Stith, G. W., Clinton, N. C. Water-motor .....	Mar. 19, 1878	673	205	13	527
205, 436	Stitt, Ransom, Cazenovia, assignor of one-half interest to William L. Stevens, Lock Berlin, N. Y. Butter-tub .....	June 25, 1878	1084	321	13	1167
202, 070	Stiverson, Anthon O., et al. (See King, John G., assignor.)					
	St. John, Alexander Popo, Mobile, Ala. Pencil-sharpener .....	Apr. 2, 1878	210	61	13	628
205, 922	St. John, Charles P., Springfield, Ohio. Sewing-machine .....	July 9, 1878	509	144 145	14	77
204, 921	St. John, Evon, Leland, Ill. Knob attachment .....	June 18, 1878	548	159	13	1091
	St. John, James A., et al. (See Bettis, James R., assignor.)					
	St. John, Justus M. (See St. John, Spencer H. and Justus M.)					
207, 911	St. John, Roswell H., Springfield, Ohio. Sewing-machine .....	Sept. 10, 1878	352	107	14	397
	St. John, S. H., et al. (See St. John, Spencer H. and Justus M., assignors.)					
199, 330	St. John, Spencer H., Cedar Rapids, Iowa. Barb for fence-wire .....	Jan. 15, 1878	634	184	13	115
205, 607	St. John, Spencer H. and Justus M., assignors to J. S. and D. E. McDaniel and S. H. St. John, Cedar Rapids, Iowa. Barbed fence-wire .....	July 2, 1878	251	75	14	40
	St. Joseph Reaper and Mower Machine Company. (See Knoblock & Bissell, assignors.)					
	St. Louis Refrigerator and Wooden Gutter Company. (See Grayson, William, assignor.)					
	St. Louis Stamping Company. (See Niedringhaus, Frederick G. and William F., assignors.)					
210, 724	Stock, Hosea T., Toledo, Ohio. Supporting-frame for excavating-machine .....	Dec. 10, 1878	371	101	14	880
204, 632	Stock, Jacob. (See Stock, John and Jacob.)					
8, 128	Stock, John and Jacob, New York, N. Y. Plate-holder .....	June 4, 1878	200	67	13	1042
205, 769	Stockbridge, Lyman R., assignor, by mesne assignments, to A. B. Crofoot, E. T. Stelle, and A. A. Cass, Haverhill, Mass. Balmoral, or laced boot .....	Mar. 10, 1878	809	246	13	545
201, 566	Stockford, Benjamin F., South Bend, Ind. Dinner-kettle .....	July 9, 1878	343	100	14	56
	Stockham, Jerome B., assignor of one-half interest to H. O. Bedell and George H. Lathrop, Jackson, Mich. Planing-machine .....	Mar. 10, 1878	577	177	13	513
199, 875	Stocking, Robert M., et al. (See Skinner, Charles C., assignor.)					
205, 437	Stockley, August Friedrich, Bishop Creek, Cal. Scrubbing-machine .....	Jan. 29, 1878	1204	354	13	219
	Stockmann, Christopher, Brooklyn, N. Y. Fountain-pen .....	June 25, 1878	1065	321	13	1167
206, 146	Stockwell, Bragg & Co. (See Stockwell, Levi W., assignor.)					
	Stockwell, Emory, assignor to Yale Lock Manufacturing Company, Stamford, Conn. Time-lock .....	July 16, 1878	758	218 219	14	113
206, 147	Same.....Safe and vault fastening .....	July 16, 1878	763	210	14	113
201, 959	Stockwell, Frank E., and Joseph Minninghoff, assignors to Frederick J. Meyers, Covington, Ky. Corn-popper .....	Apr. 2, 1878	94	27	13	613
200, 938	Stockwell, John A., Lee, England. Means for launching life-boats, &c. ....	Nov. 12, 1878	435	132 133	14	743
200, 155	Stockwell, Levi W., assignor to Stockwell, Bragg & Co., Ravenna, Ohio. Machine for making metal screws .....	Feb. 12, 1878	271	81, 82	13	283
210, 165	Stockwell, Levi W., Ravenna, Ohio, assignor, by mesne assignments, to John C. Grannis, trustee. Machine for making metal screws .....	Nov. 19, 1878	690	205 206	14	781
208, 345	Stoddard, Edward W. (See Stern & Meyn, assignors.)					
	Stoddard, Isaac H., Ansonia, Conn., assignor to E. & H. T. Anthony & Co., New York, N. Y. Photographic camera .....	Sept. 24, 1878	830	244	14	467
209, 501	Stoddard, James, San Francisco, Cal. Coupling for hydrant-suctions .....	Nov. 5, 1878	56	17	14	688
	Stoddard, Marshal W. (See Rouse & Stoddard.)					
	Stoddard, Solomon P., et al. (See Bendix, George E., assignor.)					
209, 085	Stoessiger, Augustus A., Chicago, Ill. Stove-board .....	Oct. 15, 1878	698	202	14	593
203, 367	Stohlmann, Frederick A., and Edward Pfarre, Brooklyn, N. Y. Caulerizer .....	May 7, 1878	160	46	13	842
210, 274	Stohlmann, Frederick A., Brooklyn, N. Y. Thermometer-case .....	Nov. 26, 1878	823	243	14	802
8, 271	Stokes, Russell T., Garnett, Kans. Windlass water-elevator .....	June 4, 1878	224	71	13	1044

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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202, 298	Stokes, Samuel E., jr., assignor to self and Alfred Parish, Philadelphia, Pa. Hoisting mechanism	Apr. 9, 1878	464	136	13	609
	Stolle, James W. (See Jernaud & Stolle.)					
208, 047	Stone, Daniel E., Indianapolis, Ind. Toy building-block	Sept. 17, 1878	511	152	14	422
202, 675	Stone, Edward S., Worcester, Mass. Picker-staff strap for looms	Apr. 23, 1878	901	258	13	737
	Stone, Henry C. (See Bopp, Christ., assignor.)					
	Same..... (See Manneback, Julius, assignor.)					
199, 327	Stone, Henry C., Brooklyn, N. Y. Manufacture of boxes	Jan. 15, 1878	631	183	13	174
199, 870	Same..... Box	Jan. 29, 1878	1205	354	13	219
200, 104	Same..... Wood-screw	Feb. 5, 1878	214	67	13	206
199, 504	Stone, Henry Smith, Orange, Ind. Blast-regulator for grain-separators	Jan. 22, 1878	910	267	13	100
	Stone, James Mansfield. (See Nix, Stone & Anderson.)					
198, 822	Stone, Joseph B., Jersey City, N. J. Lock-hinge	Jan. 1, 1878	101	28	13	24
	Stone, Joseph H., et al. (See Baldwin, Eben A., assignor.)					
	Stone, Joseph H., et al. (See Davis, Hilar D., assignor.)					
	Stone, Joseph M., et al. (See Baldwin, Eben A., assignor.)					
	Same..... (See Davis, Hilar D., assignor.)					
206, 051	Stone, Lauren, Dryden, N. Y. Butter-tub	July 16, 1878	655	190	14	101
206, 498	Stone, Samuel, Bristol, Tenn. Grain-separator	July 30, 1878	1196	343	14	175
210, 102	Same..... Mortising-machine	Nov. 19, 1878	688	204	14	780
				205		
205, 150	Stone, Sargeant, assignor of one-half interest to Orin H. Amy and Charles W. Andrews, Furibault, Minn. Grain-separator	June 18, 1878	775	229	13	112
	Stone, William F., et al. (See Hunter, George W., assignor.) (Reissue.)					
203, 380	Stoner, Abraham, Stony Point, La. Machine for mashing yucca	May 7, 1878	159	46	13	842
202, 601	Stoner, Benjamin F., assignor to Rockford Watch Company, Rockford, Ill. Safety-wheel for watches	Apr. 10, 1878	802	232	13	716
205, 438	Stong, Joseph E., Newtonbrook, Ontario, Canada. Farm-gate	June 25, 1878	1086	322	13	1107
202, 602	Stoops, Nesbitt D. (See Cushman, Cyrus S., assignor.)					
	Stoops, Nesbitt D., Philadelphia, Pa. Sewing-machine shuttle	Apr. 16, 1878	803	232	13	716
	Storer, John. (See Menzies & Blagburn, assignors.)					
8, 470	Storle, Ole O., assignor of one-half interest to John O. Overby, Milwaukee, Wis. Horse-power	Nov. 5, 1878	230	60	14	713
	(Reissue.)					
209, 144	Storle, Ole O., assignor of two-thirds interest to John G. Flint, jr., Milwaukee, Wis. Tension-wheel	Oct. 22, 1878	780	226	14	609
	Storm, Edward. (See Whitney, William F., assignor.) (Reissue.)					
202, 603	Stouffer, Hiram C., Canfield, Ohio, assignor of one-half interest to C. C. Trout, Sharon, Pa. Nut-lock	Apr. 16, 1878	805	232	13	716
205, 439	Stough, Charles B., Monticello, assignor of one-half interest to Henry L. Timmons, Piatt County, Ill. Ditcher	June 25, 1878	1087	322	13	1107
	Stough, Will W. (See Winger & Stough.)					
207, 455	Stout, Charles, assignor of one-half interest to William P. Thompson, Liverpool, England. Barrel-head machine	Aug. 27, 1878	855	252	14	326
	Stout, Harrison H., et al. (See Smith, William, assignor.)					
210, 164	Stovall, Phillip, Newnan, Ga. Water-wheel	Nov. 19, 1878	689	205	14	781
205, 219	Stow, Enos E., Plantaville, assignor to Peck, Stow & Wilcox Company, Southington, Conn. Casting door-knobs	June 25, 1878	861	254	13	1138
	Stow Flexible Shaft Company (limited). (See Haskins, John F., assignor.)					
200, 105	Stow, Henry M. (See Stow, William H. and Henry M.)					
	Stow, William H., Chicago, Ill., and Henry M. Stow, San Francisco, Cal. Street-pavement	Feb. 5, 1878	215	67	13	266
208, 436	Stow, William H., Chicago, Ill. Wood pavement	Sept. 24, 1878	933	273	14	479
204, 858	Stowe, Charles W., assignor of one-half interest to Royal C. Ripley, Flint, Mich. Curtain-fixture	June 11, 1878	455	133	12	1076
209, 723	Stowell, William J., Baltimore, Md. Mail-bag fastening	Nov. 5, 1878	203	60	14	708
201, 848	Stowman, Joshua S., Baltimore, Md. Preserving green coffee	Mar. 20, 1878	1075		13	389
	Strain, William H. (See Dickerson & Strain.)					
	Strait, Celestia L. (See Strait, William, assignor.)					
210, 061	Strait, Hiram, Troy, N. Y. Potato-digger	Nov. 19, 1878	580	174	14	706
208, 048	Strait, William, assignor to Celestia L. Strait, Oneonta, N. Y. Plow	Sept. 17, 1878	512	152	14	422
205, 815	Strakosch, Max, Brinn, Austria. Machine for giging designs on cloth	July 9, 1878	397	114	14	63
202, 071	Strange, Emerson C., Taunton, Mass. Game apparatus	Apr. 2, 1878	210	61	13	629
	Strasbough, Levi W. (See Wantz & Strasbough.)					
	Strattan, John T., et al. (See Swett, Sullivan Clark, assignor.)					
	Strattan, Samuel R., et al. (See Swett, Sullivan Clark, assignor.)					
210, 475	Stratton, Asa E., jr., Brazoria, Tex. Car-axle bearing	Dec. 3, 1878	89	22	14	835
204, 859	Stratton, Charles H., Salem, Ohio. Carriage-seat	June 11, 1878	456	133	13	1076
210, 166	Stratton, Charles H., Portland, Me. Brush	Nov. 19, 1878	694	207	14	781
207, 992	Stratton, John Coombs and William H., Millville, N. J. Car-coupling	Sept. 10, 1878	438	132	14	408
	Stratton, William Harvey. (See Stratton, John Coombs and William H.)					
202, 299	Straub, Ambrose W., Philadelphia, Pa. Mill-pick	Apr. 9, 1878	465	126	13	609
202, 887	Straub, Jacob J., Cedarburg, Wis. Washing-machine	Apr. 23, 1878	1126	323	13	785
208, 771	Straub, Theodore F., Allegheny City, Pa. Vent-cock for beer-fermenting casks	Oct. 8, 1878	338	97	14	541
	Strauber, Frank A. (See Hodel & Strauber.)					
206, 906	Strause, Henry S., New York, N. Y. Corset	Aug. 13, 1878	275	83	14	244
208, 049	Same..... same	Sept. 17, 1878	513	153	14	422
204, 259	Strauss, Samuel, Charleston, W. Va. Barrel for shipping bottled liquors	May 28, 1878	1125	321	13	986
	Strawbridge, Alfred G. (See Lawrence & Strawbridge.)					
	Strawn, Halbert J. (See Asbury, William S., assignor.)					
199, 328	Strawser, Rubin, Kokoda, Pa. Bee-hive	Jan. 15, 1878	632	184	13	114
209, 145	Street, Edwin, South Orange, N. J. Counterfeit-coin detector	Oct. 22, 1878	780	227	14	609
203, 792	Street, George O., Brooklyn, N. Y. Extension-ring for jewelry	May 14, 1878	597	166	13	907
190, 941	Street, John W., Cleveland, Ohio. Railway cattle-guard	Feb. 5, 1878	54	17	13	241
202, 676	Streeter, Nelson R., Groton, N. Y. Fluting-iron	Apr. 23, 1878	902	259	13	737
204, 922	Same..... Fluting and sad iron holder	June 18, 1878	549	160	13	1091
208, 126	Same..... Shawl-strap	Sept. 17, 1878	589	175	14	433
209, 305	Stroily, Joseph, assignor of one-half interest to John T. Young, Vincennes, Ind. Slide-valve	Oct. 22, 1878	935	272	14	630
210, 060	Strellitz, Philipp, Berlin, Prussia. Compound for preventing radiation of heat	Nov. 19, 1878	579		14	766
204, 690	Strenby, Ferdinand, New Orleans, La. Cotton-gin and lint-feeder	June 11, 1878	276	85	13	1055
203, 300	Stribley, George, Cincinnati, Ohio. Stay for seams of boots and shoes	May 7, 1878	71	21	13	830
199, 329	Stricker, George, Catawissa, Pa. Vehicle-spring	Jan. 15, 1878	633	184	13	115
203, 312	Same..... same	Apr. 30, 1878	1464	428	13	813
203, 213	Same..... same	Apr. 30, 1878	1465	428	13	813

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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208, 437	Strickland, Morgan D., Saint Louis, Mo. Injector	Sept. 24, 1878	933	274	14	479
208, 639	Strickland, William H., et al. (See Morris, Benjamin Franklin, assignor.)	July 30, 1878	1341	386	14	103
201, 569	Striddle, Friedrich, Menasha, Wis. Plow	Mar. 19, 1878	783	238 230	13	542
206, 511	Striedinger, Julius H., New York, James R. F. Kelly, Brooklyn, and Kelles Korrow, Green Point, N. Y. Apparatus for subaqueous drilling, laying foundations, &c.	July 2, 1878	49	15	14	15
205, 007	Striffler, Daniel O., Saint Louis, Mo. Fire-escape	June 18, 1878	630	185	13	1102
200, 776	Striker, Flavius P. (See Firmineli & Striker)	Feb. 26, 1878	926	272	13	398
204, 391	Stringer, George, and Thomas Francis, Ithaca, N. Y. Steam-valve	May 28, 1878	1257	358	13	1002
200, 777	Stringfellow, H. C. (See Baird, James B., assignor.)	Feb. 26, 1878	926	272	13	398
201, 849	Stritenroth, Andrew L., assignor of one-half interest to Fred. J. V. Le Caud, Natchez, Miss. Cotton-gin	May 28, 1878	1257	358	13	1002
204, 174	Strobel, Caleb and Fredrick, Waldo, Ohio. Log-turner	Feb. 26, 1878	927	272	13	398
207, 450	Strobel, Fredrick. (See Strobel, Caleb and Fredrick.)	Mar. 26, 1878	1070	327	13	589
207, 450	Strobridge, H. A. (See Sutherland, Albert M., assignor.)	May 28, 1878	1033	294	13	974
209, 630	Strobridge, Turner, New Brighton, Pa. Coffee and spice mill	Aug. 27, 1878	856	253	14	326
209, 630	Strohm, Samuel, assignor of one-half interest to W. H. Wright, Philadelphia, Pa. Attachment for dental plugging instruments	Nov. 12, 1878	273	81	14	722
204, 174	Stromberg, Charles J., Chicago, Ill. Railway coupon-ticket	Nov. 5, 1878	103	30	14	605
207, 450	Strong, Henry C., assignor to self and Oscar F. Temple, Maunston, Wis. Saw-gummer	Feb. 5, 1878	109	36	13	250
209, 630	Strong, Henry N., Cornwall, N. Y. Method of uniting the rubber rolls of wringers	Jan. 22, 1878	910	267	13	163
209, 630	Strong, Myron H., Brooklyn, N. Y., assignor to Lemuel W. Serrell, trustee. Apparatus for the manufacture of illuminating-gas	Apr. 23, 1878	1125	323	13	765
200, 004	Strong, William A., jr., administrator. (See Moore, William N.)	June 18, 1878	549	160	13	1091
199, 595	Stroope, Jacob Pirkey, Arkadelphia, Ark. Bee-hive	July 16, 1878	765	220	14	113
202, 880	Stroub, John L., New York, N. Y. Clam-baker	May 21, 1878	947	271	13	959
204, 923	Strouse, Bernhard, et al. (See Blackburn & Moelein, assignors.)	Sept. 10, 1878	439	132	14	408
202, 880	Strouse, Henry L., et al. (See Blackburn & Moelein, assignors.)	Jan. 22, 1878	910	267	13	167
202, 880	Strube, Conrad L. (See Reimann, Carl, assignor.)	Mar. 26, 1878	1070	327	13	589
204, 923	Strunz, Stephen, Pittsburg, Pa. Soap-crutching machine	May 28, 1878	1257	358	13	1002
206, 149	Stryker, Henry, Goshen, Ind. Hog-scalding and feed-steamer	July 16, 1878	765	220	14	113
204, 112	Stryker, Samuel G. (See Wells, Joseph, assignor.)	May 21, 1878	947	271	13	959
207, 993	Stuart, Charles C., New York, N. Y. Machine for preparing moldings for gilding	Sept. 10, 1878	439	132	14	408
199, 596	Stuart, David, assignor to self and Richard Peterson, Philadelphia, Pa. Cooking-stove	Jan. 22, 1878	910	267	13	167
206, 148	Stuart, Ithamer W., and James G. Allen, Holliday Station, Ill., assignors to said Allen. Ditching-plow	July 16, 1878	765	220	14	113
206, 148	Stuart, John J., New York, N. Y. Pump	Mar. 26, 1878	1070	327	13	589
201, 714	Stuart, Robert, Cedar Rapids, Iowa. Oatmeal-machine	Jan. 22, 1878	910	267	13	167
199, 668	Stuart, Robert J., Yonkers, N. Y. Window-screen	July 16, 1878	765	220	14	113
199, 668	Stuart, William Fulton, and Delos Jay Parker, Garden Plain, Ill. Sand-guards for vehicle-wheels	Mar. 26, 1878	1070	327	13	589
199, 756	Stuart, William J., et al. (See Richey, Gaspar T., assignor.)	Jan. 29, 1878	1014	295	13	190
201, 206	Stubbs, Jesse, Mount Pleasant, Iowa. Road-scraper	Jan. 29, 1878	1014	295	13	190
201, 206	Stucko, Charles, Henderson, Minn. Grain-separator	Jan. 29, 1878	1014	295	13	190
209, 060	Stucky, Stephen, Lincoln, Ala. Pump	Mar. 12, 1878	385	119	13	480
199, 119	Stumm, Edward, Philadelphia, Pa. Water-boiler for stoves and ranges	Oct. 15, 1878	698	202	14	593
207, 457	Stumm, Thomas, Ada, Ohio. Washing-machine	Jan. 8, 1878	412	121	13	80
202, 300	Stump, John Henry, Baltimore, Md. Attachment for oil-cans	Aug. 27, 1878	857	253	14	326
203, 214	Stumpf, Florence H., Saint Joseph, Mo. Fluting-iron	Apr. 9, 1878	466	156	13	669
206, 640	Sturgeon, William. (See Merrin, William L., assignor.)	Apr. 30, 1878	1465	428	13	813
206, 640	Sturm, August, New York, N. Y. Dress-trimming	July 30, 1878	1343	386	14	194
204, 138	Sturtevant, Andrew. (See Greene & Sturtevant.)	July 16, 1878	750	216	14	112
205, 440	Sturtevant, Charles F. (See Servis, David, assignor.)	June 25, 1878	1089	322	13	1168
204, 138	Sturtevant, Orrin L., Ogden, Iowa. Feed-cooker	Aug. 27, 1878	976	286	14	311
205, 440	Sturtevant, Thomas L., South Framingham, assignor to William H. Bowker & Co., Boston, Mass. Disintegrating-mill	May 14, 1878	597	167	13	907
207, 566	Stuttaford, Archelaus, Ottawa, Canada. Peg for stringed instruments	May 14, 1878	597	167	13	907
203, 703	Stutz, Sebastian, Pittsburg, Pa. Ore-crusher	May 14, 1878	597	167	13	907
203, 794	Same. Same	May 14, 1878	597	167	13	907
204, 260	Stward, Charles W. (See Hobart & Stward.)	May 28, 1878	1126	321	13	986
207, 220	Sudderick, Margaret, Buffalo, N. Y. Hand-guide for piano-fortes	Aug. 20, 1878	596	179	14	288
207, 994	Sues, Julius, and Sylvester W. Raplee, Louisville, Ky. Child's carriage	Sept. 10, 1878	440	132	14	408
206, 304	Sullings, Henry, Kalamazoo, Mich. Car-coupling tool	June 25, 1878	950	282	13	1150
206, 546	Sullivan, Daniel, Bangor, Me. Heater	Oct. 1, 1878	89	26, 27	14	501
206, 546	Sullivan, Daniel, Bangor, Me., assignor to Edward H. Ashcroft, Boston, Mass. Locomotive-boiler	Oct. 1, 1878	89	26, 27	14	501
201, 850	Sullivan, J. H. (See Davenport, John W., assignor.)	Mar. 26, 1878	1077	327	13	589
199, 877	Sullivan, J. N., et al. (See Mullins, William, assignor.)	Jan. 29, 1878	1207	354	13	220
8, 300	Sullivan, John, Stonington, Conn. Bush-hammer	Aug. 27, 1878	1008	294	14	344
202, 677	Sulouff, David P., Millintown, Pa. Mill-feeding apparatus	Apr. 23, 1878	903	259	13	737
202, 766	Summers, Daniel J. (See Baby & Summers.)	Apr. 23, 1878	903	259	13	737
203, 388	Summers, John P., Tiffin, Ohio. Rock-drill for boring and drilling wells	Apr. 23, 1878	903	259	13	737
203, 388	Summers, Lucius P., assignor of one-third interest to John M. Spring, New Britain, Conn. Machine for making fiber	May 7, 1878	101	46	13	842
206, 641	Sumner, Dwight C., Millbury, Mass. Cloth-finishing machine	Nov. 19, 1878	709	212	14	783
206, 641	Sumner, Eli J. (See Johnson, Richard P., assignor.)	Feb. 5, 1878	54	18	13	241
206, 641	Sumner, Franklin A., Old Fort, N. C. Clothes-pounder	Aug. 13, 1878	276	84	14	244
206, 907	Sumner, James D., Lexington, assignor to Joseph M. Laughlin, Boston, Mass. Horse-shoe-nail machine	May 21, 1878	678	193	13	925
203, 859	Sunderman, William. (See Demig & Bacher, assignors.)	Feb. 5, 1878	109	36	13	250
200, 005	Supple, Joseph, Buffalo, N. Y. Reuder for canal-boats	May 14, 1878	622	173	13	910
8, 230	Surlan, William Bishop, Fort Dodge, Iowa. Window-blind stop	Nov. 10, 1878	581	174	14	796
210, 062	Surla, George C., Rochester, Pa., assignor to E. W. Bingham. Furnace for burning kilns	Aug. 13, 1878	344	100	14	252
206, 982	Sursa, James W., assignor to Henry F. Weohrheide, Venice, Ill. Cigar-press	July 30, 1878	1343	387	14	194
206, 982	Sutherland, Albert M., assignor to H. A. Strobridge, Penn Yan, N. Y. Grain-separator	July 9, 1878	345	101	14	56
206, 641	Sutherland, Daniel A., Lynn, Mass. Staying the seams of boots and shoes	July 30, 1878	1343	387	14	194
205, 770	Sutherland, Mosher A., New York, N. Y. Utilizing waste tin- scrap	July 30, 1878	1344	387	14	194
206, 642	Sutherland, William Sedden, Coomb's Wood, Halesowen, England. Apparatus for preparing gaseous fuel	July 30, 1878	1345	387	14	194
206, 643	Same. Process for preparing gaseous fuel	Jan. 22, 1878	788	231	13	147
199, 479	Sutley, George W. (See O'Donnell, Francis B., assignor.)					
199, 479	Sutton, Benjamin F., Brooklyn, N. Y. Syringe					

*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'e.	Vol.	Page.
203, 795	Sutton, Edward S., North Weymouth, Mass. Hammock .....	May 14, 1878	600	167	13	967
209, 724	Sutton, John W., New York, N. Y. Fire-extinguisher .....	Nov. 5, 1878	204	60, 61	14	718
190, 120	Sutton, William H., Purdy, Tenn. Nut-lock .....	Jan. 8, 1878	413	121	13	10
208, 274	Svedberg, John A., Washington, D. C. Governor for marine engines .....	Sept. 24, 1878	767	224	14	458
	Swain, George. (See Frost, Francis N., assignor.) .....					
203, 672	Swain, Philip S., New York, N. Y. Combined nozzle and tap .....	May 14, 1878	469	134	13	891
208, 862	Swan, James, Seymour, Conn. Manufacture of auger-bits .....	Oct. 8, 1878	441	128	14	555
209, 782	Same .....	Nov. 12, 1878	273	82	14	722
210, 220	Same .....	Nov. 26, 1878	766	217	14	794
201, 716	Swan, Peleg, Litchfield, and Benjamin E. Riggs, Homer, Mich. Nut-lock .....	Mar. 26, 1878	639	288	13	369
201, 715	Swan, Thomas B., Mechanics Falls, Me. Lifting and force pump .....	July 2, 1878	254	76	14	40
202, 767	Swan, Thomas Byrn, assignor to self and O. E. Dorris, Forest City, Ark. Seed-planter .....	Mar. 26, 1878	658	288	13	549
202, 048	Swank, John, and Arnold Jehuke, Denver, Colo. Fire-escape .....	Apr. 23, 1878	995	286	13	749
201, 067	Swaren, William Albert, Robinson, Ill. Heating-drum .....	Mar. 5, 1878	125	41	13	435
210, 368	Swartz, J. Wilson, Philadelphia, Pa. Crayon .....	Mar. 5, 1878	246		13	452
	Swartz, David, Woodstock, Va. Bed-bottom .....	Nov. 26, 1878	9-9	271	14	815
	Swartz, Moses. (See Pollard, James M., assignor.) .....					
198, 780	Swartz, Samuel, Buffalo, N. Y., and John R. Cross, Cleveland, Ohio. Wood-bending machine .....	Jan. 1, 1878	62	16	13	17
208, 211	Swasey, Samuel T., New York, N. Y. Screw-propeller .....	Sept. 17, 1878	681	240	14	444
201, 960	Swayne, Henry Stuart, Toledo, Ohio. Machine for filling moldings .....	Apr. 2, 1878	95	27, 28	13	613
204, 261	Swedberg, Carl Johan, assignor to Joseph S. Dennis and Henry N. Wheeler, Chicago, Ill. Lantern .....	May 28, 1878	1126	322	13	986
205, 587	Sweeney, Alexander, assignor of one-half interest to John Mathewson, San Francisco, Cal. Boiler-covering .....	July 2, 1878	129	39	14	26
	Sweeney, H. N., et al. (See Sweetland, Jerome B., assignor.) .....					
199, 669	Sweeney, John, New Haven, Conn. Journal-bearing .....	Jan. 23, 1878	1015	296	13	190
207, 667	Same .....	Aug. 27, 1878	977	267	14	341
199, 121	Sweeney, Peter, New York, N. Y. Journal for shafts and axles .....	Jan. 8, 1878	413	121	13	80
210, 725	Sweet, Alonzo Louis, assignor of one-half interest to Bacon Arms Company. Revolving fire-arm .....	Dec. 10, 1878	372	102	14	880
200, 106	Sweet, Charles Thomas, Cumberland, Ohio. Gate and door fastener .....	Feb. 5, 1878	217	67	13	266
	Sweet, Clayton E. (See Norris & Sweet.) .....					
205, 441	Sweet, George, Dansville, N. Y. Harvester-platform .....	June 25, 1878	1090	323	13	1168
202, 482	Sweet, Miles, Troy, N. Y. Curry-comb .....	Apr. 16, 1878	664	195	13	701
202, 481	Sweet, William, South Granville, N. Y. Butter-worker .....	Apr. 16, 1878	663	194	13	701
208, 547	Sweetland, Adoniram J., Boston, Mass. Pipe-coupling or leak-stopper .....	Oct. 1, 1878	90	27	14	501
203, 215	Sweetland, Jerome B., Pontiac, Mich. Bosom-board .....	Apr. 30, 1878	1466	429	13	813
209, 146	Sweetland, Jerome B., Pontiac, assignor of two-thirds interest to H. N. Sweeney and A. McPherson, Detroit, Mich. Evaporator and fruit-drier .....	Oct. 22, 1878	781	227	14	609
201, 570	Swem, Lawrence Wilson, West Liberty, Iowa. Lamp-extinguisher .....	Mar. 19, 1878	785	239	13	542
	Swentzel, E. W. (See Gissingier, Samuel, assignor.) .....					
200, 357	Swett, Edward E., Olean, N. Y. Working-barrel for oil-wells .....	Feb. 12, 1878	478	141	13	315
205, 105	Same .....	June 18, 1878	724	216	13	1115
203, 957	Swett, George W., Troy, N. Y. Melting and treating iron and steel rails and scrap .....	May 21, 1878	784		13	939
200, 582	Swett, James H., Pittsburg, Pa. Mill for rolling metal .....	Feb. 19, 1878	709	208	13	358
201, 571	Swett, Levi J., Saint Albans, Vt. Depot-platform .....	Mar. 19, 1878	786	209	13	542
207, 995	Swett, Sullivan Clark, Washington, D. C., assignor to self and Samuel R. and John T. Strattan, Strattanville, Pa. Device for lighting and extinguishing fires, &c. ....	Sept. 10, 1878	441	132	14	408
199, 384	Swift, Asa R., Chicago, Ill. Railway-signal .....	Jan. 22, 1878	607	204	13	132
208, 275	Swift, James A., Washington, D. C. Electrical alarm-striking device .....	Sept. 24, 1878	768	224	14	458
206, 499	Swift, Moses C., New Bedford, Mass. Machine for sponging and drying cloth .....	July 30, 1878	1107	343	14	176
207, 629	Same .....	Sept. 3, 1878	45	14	14	355
	Swift, O. F. (See Rasey, John D., assignor.) .....					
	Swift, T. F., et al. (See Morris, Benjamin Franklin, assignor.) .....					
200, 939	Swift, William H., Medford, assignor of one-half interest to Charles F. Brown, Reading, Mass. Mufflers for the escape of exhaust steam .....	Nov. 12, 1878	437	133	14	743
203, 087	Swimford, J. M. C. (See Comstock, Austin W., assignor.) .....					
204, 392	Swinburne, Thomas A., Mount Braddon, Torquay, England. Anchor .....	Apr. 30, 1878	1331	387	13	796
207, 221	Swindell, Henry, Allegheny, Pa. Metallurgic furnace .....	May 28, 1878	1258	359	13	1002
	Swindell, William, Allegheny, Pa. Metallurgic gas-furnace .....	Aug. 20, 1878	596	179	14	288
210, 369	Same .....	Nov. 26, 1878	929	271	14	815
202, 072	Swindells, James, assignor to James Kirk, Stockport, Great Britain. Stand for casks or barrels .....	Apr. 2, 1878	211	62	13	629
201, 717	Swinerton, James F. (See Huber, Titus, Durfee & Swinnerton.) .....	Mar. 26, 1878	940	289	13	569
199, 002	Swope, Charles L. (See Moore, Thomas B., assignor.) .....					
200, 006	Swope, Isaac, Saint Louis, Mo. Elastic-welvet felt packing .....	Jan. 8, 1878	293	66	13	61
206, 052	Sycks, John M., assignor to Mattie C. Sycks, Delaware, Ohio. Heating-stove .....	Feb. 5, 1878	110	36	13	250
199, 122	Sycks, Mattie C. (See Sycks, John M., assignor.) .....					
204, 860	Sykes, Philip, Providence, R. I. Elevator .....	July 16, 1878	656	190	14	101
198, 957	Silverster, Henry, New York, N. Y. Advertising-lantern .....	Jan. 8, 1878	414	122	13	80
192, 823	Symonds, Charles S. C., Philadelphia, Pa. Steam and hydraulic packing .....	June 11, 1878	457	134	13	1076
202, 483	Symonds, Thomas, East Boston, Mass. Dredging-bucket .....	Jan. 8, 1878	247	71	13	54
	Symons, Paul, Plainfield, N. J. Grete for cooking and heating stoves .....	Jan. 1, 1878	101	29	13	24
	Syms, William E., assignor to Crocker Manufacturing Company, Holyoke, Mass. Ornamental paper .....	Apr. 16, 1878	665	195	13	701
200, 229	Synnot, Thomas W., Wrenonah, N. J. Fruit-jar .....	Feb. 12, 1878	344	102	13	294
8, 031	Syversen, Andrew, assignor of one-half interest to Joseph S. Dennis, Chicago, Ill. Sheet-metal elbow .....	Jan. 8, 1878	435	128	13	83
	Taber, Bradford, et al. (See Giguere, Timothy, assignor.) .....					
199, 878	Tabor, Clark A., Hope Valley, R. I. Stop-motion for railway drawing-heads .....	Jan. 29, 1878	1208	354	13	220
203, 389	Tabor, Frank E., Rockville, R. I. Stop-motion for railway drawing-heads .....	May 7, 1878	163	47	13	843
206, 500	Tabor, Harris, assignor to B. W. Payne & Sons, Corning, N. Y. Governor for valve-motions .....	July 30, 1878	1198	344	14	176
210, 643	Tabor, Harris, Corning, N. Y. Indicator for steam-engines, &c. ....	Dec. 10, 1878	287	79	14	870
	Taft, Alanson W. (See Pearce & Taft.) .....					
	Same .....					
	Taft, Joseph W., et al. (See Kirby, James A., assignor.) .....					
	Taggart, Byron B., et al. (See Stilwell, Charles B., assignor.) .....					
	Same .....					
200, 728	Taggart, Hollis Thompson, Emporium, Pa. Postage-stamp-recording cabinet .....	Nov. 5, 1878	207	62	14	708



## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'e.	Vol.	Page.
210, 370	Tainter, Charles C., <i>et al.</i> (See Day, Joshua D., assignor.) Tait, Augustus H., jr., assignor of one-half interest to Edward Hem, Jersey City Heights, N. J. Button-hole-stitching attachment for sewing-machines .....	Nov. 20, 1878	931	272	14	818
210, 644	Tait, Felix B., <i>et al.</i> (See Hill, Andrew L., assignor.) Tait, James G., Stockton, Cal. Car-truck .....	Dec. 10, 1878	289	79	14	870
210, 820	Talcott, Levi, Minetto, N. Y. Wagon-rack .....	Dec. 10, 1878	469	132	14	894
207, 912	Talcott, Samuel C., Ashtabula, Ohio. Machine for measuring and marking fabrics .....	Sept. 10, 1878	353	107	14	397
206, 150	Talcott, W. A., <i>et al.</i> (See Smith, Joseph D., assignor.) Talcott, Walter Orlando. (See Builong & Talcott.) Talley, Joseph R., Piasa, Ill. Gate .....	July 16, 1878	767	220	14	114
209, 725	Talling, Richard. (See Field & Talling.) Tallmadge, Henry H. (See Miller, Tallmadge & Brown.) Tallmadge, James W., New York, N. Y. Pipe-stem .....	Nov. 5, 1878	205	61	14	708
200, 583	Tallman, Charles H. (See Baron & Tallman.) Tallman, John C., New York, N. Y. Manufacture of corsets .....	Feb. 19, 1878	710	209	13	258
204, 459	Tallman, John C., assignor to Lucien C. Warner, New York, N. Y. Corset .....	June 4, 1878	43	14	13	1018
204, 460	Same. Bosom-pad .....	June 4, 1878	43	14	13	1018
207, 081	Talpey, Joseph A., Somerville, Mass. Machine for unhairing, scouring, and currying hides .....	Aug. 13, 1878	437	135	14	204
199, 597	Same. Machine for unhairing, scouring, and currying hides .....	Jan. 22, 1878	912	267	13	167
232, 301	Taltavull, Peter, Washington, D. C. Ball-target thrower .....	Apr. 9, 1878	467	137	13	669
199, 757	Tannehill, Eli M. (See Longworth & Tannehill.) Tanner, Charles H., Boston, Mass. Portable cooking apparatus .....	Jan. 29, 1878	1093	321	13	202
203, 315	Tapley, Daniel J., New York, N. Y. Cutting attachment for sewing-machines .....	June 25, 1878	993	285	13	1151
200, 630	Tapley, Jesse F., <i>et al.</i> (See Bryan, Clark W., assignor.) (Reissue.) Tapley, Jesse F., Springfield, Mass. Temporary binder .....	Feb. 26, 1878	773	227	13	376
204, 394	Taplin, Mahlon, Montpelier, Vt. Saw-mill carriage .....	May 28, 1878	1200	560	13	1003
210, 064	Tapp, William J. (See Roop, Joseph W., assignor.) Tappan, Frank A., and Samuel A. Shaw, Kansas City, Mo. Washing-machine .....	Nov. 19, 1878	583	174	14	766
207, 082	Tappey, William H., Petersburg, Va. Portable steam-engine .....	Aug. 13, 1878	439	136	14	204
209, 087	Tappey, William H., and Alexander Steel, Petersburg, Va. Cotton and hay-press .....	Oct. 15, 1878	659	202	14	503
199, 235	Tarble, H. J. (See Eade, Charles, assignor.) Tarbox, Myron H., assignor to M. H. Tarbox & Co., Lockport, N. Y. Snatch-block .....	Jan. 15, 1878	536	158	13	100
209, 200	Tarr, John B., Fairhaven, Mass. Fog and alarm whistle .....	Oct. 22, 1878	836	241	14	616
202, 384	Tasker, Stephen P. M., Philadelphia, Pa. Pipe-coupling .....	Apr. 16, 1878	570	167	13	687
205, 588	Same. Metal-bending machine .....	July 2, 1878	129	39	14	26
209, 088	Tate, Edward, Jamestown, N. C. Hill-side shovel and subsoil-plow combined .....	Oct. 15, 1878	700	203	14	503
204, 395	Tate, Wiloy H., and John E. Curtis, Jacksonville, Ark. Cotton-press .....	May 28, 1878	1261	260	13	1093
199, 236	Tatem, Joseph Davidson, Ayer Junction, Mass. Desk .....	Jan. 15, 1878	536	158	13	100
8, 083	Tatham, Benjamin, New York, N. Y. Shot-manufacturing machine. (Reissue.) Tatham, James, Philadelphia, Pa. Indicator for freight-cars .....	Feb. 12, 1878	502	147	13	318
205, 151	Same. Indicator .....	June 18, 1878	777	230	13	1122
207, 319	Same. Indicator .....	Aug. 20, 1878	696	208	14	301
203, 088	Tatro, Charles T., assignor of one-half interest to Mason W. Sherman, Hartford, Conn. Car-ventilator .....	Apr. 30, 1878	1332	387	13	790
206, 983	Tatum, Charles A., <i>et al.</i> (See Atwater, Richard M., assignor.) Tatum, Charles A., New York, N. Y. Ball-target .....	Aug. 13, 1878	345	106	14	252
208, 212	Tatum, John W., Centre, Ala. Churn-dasher .....	Sept. 17, 1878	682	201	14	445
206, 151	Tausley, Thomas, jr. (See Gornall, Richard, assignor.) Tavener, Robert W., assignor of one-half interest to Henry H. Norrington, West Bay City, Mich. Measuring-faucet .....	July 16, 1878	768	220	14	114
210, 371	Taviner, Robert W., assignor of one-half interest to Henry H. Harrington, West Bay City, Mich. Lubricator .....	Nov. 26, 1878	933	272	14	810
204, 861	Taws & Hartman. (See Hartman, John M., assignor.) Taylor, Augustus E., and Jewett R. Johnson, assignor to Taylor Manufacturing Company, New Britain, Conn. Burglar-alarm .....	June 11, 1878	458	134	13	1076
202, 888	Taylor, Benjamin H., Rosedale, Miss., assignor of one-half interest to Elden G. Fields. Rotary engine .....	Apr. 23, 1878	1126	323	13	765
203, 860	Taylor, Charles A. (See Tilton, William F., assignor.) Taylor, Charles A., Chicago, Ill. Trunk-fixture .....	May 21, 1878	679	193	13	925
210, 576	Taylor, Charles F., Springfield, Mass. Paper box .....	Dec. 3, 1878	207	54	14	850
209, 631	Taylor, Charles W., <i>et al.</i> (See Barlow, Charles, assignor.) Taylor, Dock Edward, Washington, San Bernardino, Cal. Rotary ore-stamp .....	Nov. 5, 1878	104	31	14	695
205, 009	Taylor, Edmund B., assignor of three-fourths interest to Robinson Williams and John W. Deering, Portland, Me. Hat-pouncing machine .....	June 18, 1878	631	185	13	1102
207, 458	Taylor, Edward, New Providence, Iowa. Cattle-pump .....	Aug. 27, 1878	858	253	14	326
209, 147	Taylor, Elhanan C. (See Isbell & Taylor.) Taylor, George, New York, N. Y. Pulley .....	Oct. 22, 1878	782	227	14	609
200, 778	Taylor, George Ralph, Cranston, R. I. Match-safe .....	Feb. 26, 1878	927	273	13	398
201, 068	Taylor, Harrison P., Minerva, Ohio. Bench-plane .....	Mar. 5, 1878	246	78	13	432
206, 366	Taylor, Henry A. (See Goodwyn, George W., assignor.) Taylor, Henry P. (See Bailey, Michael B., assignor.) Taylor, Herbert A., Cornhill, London, and Alexander Muirhead, 159 Camden Road, Middlesex County, England. Telegraphic accumulator and condenser .....	July 23, 1878	1036	297	14	151
207, 508	Taylor, James. (See Christman & Caldwell, assignors.) Taylor, James, Luzerne, N. Y. Manufacture of paper-pulp from wood .....	Aug. 27, 1878	977	287	14	341
198, 908	Taylor, James G., Brasher Falls, N. Y. Churn .....	Jan. 1, 1878	191	54	13	38
208, 365	Taylor, James P., Elizabethton, assignor of one-half interest to John Baxter, Knoxville, Tenn. Machine-gun .....	July 23, 1878	1033	296	14	151
100, 003	Taylor, Jennie C., <i>et al.</i> (See Taylor, Lewis P., assignor.) Taylor, John. (See Dickerson & Strain, assignors.) Taylor, John E., Springfield, Mass. Printing attachment for paper-ruling machines .....	Jan. 8, 1878	294	86	13	61
199, 237	Taylor, John F., Charleston, S. C. Steam and hydraulic press .....	Jan. 15, 1878	537	159	13	160
206, 501	Taylor, John Fisher, Greenville, Conn. Steam and hydraulic press .....	July 30, 1878	1199	344	14	176
205, 316	Tays, John Henry, New Braunfels, Tex. Draw-gage .....	June 25, 1878	964	285	13	1151
205, 008	Taylor, John Morrison, and John Mackay, Fredericton, New Brunswick, Canada. Rein-holding attachment for harnesses .....	June 18, 1878	630	185	13	1102
207, 459	Taylor, John T. (See Carlisle & Taylor.) Taylor, Jonathan V., Lansingburg, N. Y. Cake-griddle .....	Aug. 27, 1878	869	254	14	326
207, 091	Taylor, Joseph, New Orleans, La. Sandpapering-machine .....	Sept. 3, 1878	107	32	14	362
201, 466	Taylor, Joseph W., Brooklyn, N. Y. Chimney-cap .....	Mar. 19, 1878	676	206	13	527
201, 718	Taylor, Lewis P., assignor to Jennie C. Taylor and Ira C. Kilburn, South Orange, N. J. Type-holder .....	Mar. 26, 1878	941	289	13	560
203, 091	Taylor Manufacturing Company. (See Taylor & Johnson, assignors.) Taylor, Mary J., Brooklyn, N. Y. Envelope .....	Apr. 30, 1878	1334	388	13	797
190, 480	Taylor, Oliver L., Fayetteville, N. Y. Gate .....	Jan. 22, 1878	788	232	13	117

*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. E.	Vol.	Page.
210, 577	Taylor, Richard, Leicester, England. Card for holding and exhibiting braid .....	Dec. 3, 1878	208	55	14	850
	Taylor, Robert W. ( <i>See</i> Copeland & Taylor.) .....					
202, 604	Taylor, Serrell, Chicago, Ill. Horse-collar .....	Apr. 16, 1878	800	233	13	716
	Taylor, T. Frank, <i>et al.</i> ( <i>See</i> Johnson, Alexander S., assignor.) .....					
201, 719	Taylor, Thomas, Norwalk, assignor to Norwalk Lock Company, South Norwalk, Conn. Door-knob .....	Mar. 23, 1878	941	229	13	559
203, 090	Taylor, Thomas, Washington, D. C. Medicated soap .....	Apr. 30, 1878	1333		13	707
208, 098	Taylor, Thomas P., Bridgeport, Conn. Clasp .....	Oct. 15, 1878	597	173	14	580
208, 346	Taylor, Thomas S., Fort Wayne, Ind. Printer's type-measure .....	Sept. 24, 1878	840	245	14	468
206, 644	Taylor, Warren Burton, Sharon, Pa. Feather-renovator .....	July 30, 1878	1326	337	14	104
8, 379	Taylor, Warren H., assignor to Yale Lock Manufacturing Company, Birmingham, Conn. Lock .....	Aug. 20, 1878	715	214	14	303
199, 331	Taylor, Warren H., assignor to Yale Lock Manufacturing Company, Stamford, Conn. Post-office box .....	Jan. 15, 1878	634	185	13	115
201, 572	Same.....Striker for spring locks and latches .....	Mar. 19, 1878	787	239	13	543
208, 863	Same.....Lock .....	Oct. 8, 1878	442	123	14	555
204, 510	Taylor, William, assignor to self and George W. Robertson, Peckskill, N. Y. Gate for patterns .....	June 4, 1878	84	28	13	1024
205, 771	Taylor, William, and Michael Lortz, Saint Louis, Mo. Beer-cooler .....	July 9, 1878	346	100	14	56
206, 694	Taylor, William, Portland, Mo. Harpoon .....	Aug. 6, 1878	39	11, 12	14	211
	Taylor, William J. ( <i>See</i> Richardson & Taylor.) .....					
206, 053	Taylor, William J., Chester, N. J. Manufacture of gas .....	July 10, 1878	656	190	14	101
	Teague, Charles E. ( <i>See</i> Winter, David T., assignor.) .....					
205, 317	Teague, Joseph C., Wabash, Ind. Combined plow and harrow .....	June 25, 1878	064	283	13	1151
201, 300	Teahl, John H., Reading, assignor to E. G. Smyser, York, Pa. Grain cleaning and scouring machine .....	Mar. 12, 1878	491	151	13	494
208, 804	Teal, Daniel E., Oneida, N. Y. Folding and tilting chair .....	Oct. 8, 1878	443	123	14	555
203, 089	Teats, Hermann, Indianapolis, Ind. Mattress .....	Apr. 30, 1878	1333	367	13	797
211, 064	Tebay, Daniel H., Greenfield, North Wales. Piston water-meter .....	Dec. 17, 1878	781	214	14	040
200, 949	Teepell, Francis, Akron, Ohio. Millstone-exhaust .....	Mar. 5, 1878	126	41	13	435
	Tedt, George. ( <i>See</i> Sears, Thomas F., assignor.) .....					
205, 010	Tedt, William H. ( <i>See</i> Monakay, Edward, assignor.) .....	June 18, 1878	632	186	13	1103
901, 961	Telfer, John C., Cleveland, Ohio. Means for packing celery-tops .....	Apr. 2, 1878	98	28	13	613
206, 503	Teller, Addison M., Morrison, Ill. Device for watering animals .....	July 30, 1878	1201	344	14	176
206, 504	Same.....Stove-door .....	July 30, 1878	1202	345	14	176
	Temple, Oscar F. ( <i>See</i> Strong, Henry C., assignor.) .....					
205, 011	Templeton, Alonzo, Louisville, Ky. Clamps for securing corks in bottles .....	June 18, 1878	633	186	13	1103
206, 054	Tenant, Hanson P., East Germantown, assignor to Kerrick & Winegardner, Indianapolis, Ind. Steam-jet pump .....	July 16, 1878	650	190	14	101
	Tennant, Thomas. ( <i>See</i> Stephens, James A., assignor.) .....					
207, 222	Tennent, Gilbert B., Asheville, N. C. Wheelbarrow .....	Aug. 20, 1878	598	180	14	288
207, 830	Tennent, John Courtois, Philadelphia, Pa. Cork-cutting machine .....	Sept. 10, 1878	260	81, 82	14	385
206, 502	Tenney, Benjamin Rowe, assignor to Jane Ann Fenny, Poughkeepsie, N. Y. Ash-sifter .....	July 30, 1878	1200	344	14	176
8, 166	Tenney, Charles F., and Thomas J. Hobbs, Baldwinville, Mass., assignors, by mesne assignments, to Thompson, Perley & Waite. Combined carriage and chair. (Re-issue.) .....	Apr. 9, 1878	502	146	13	674
	Tenney, Jane Ann. ( <i>See</i> Tenney, Benjamin Rowe, assignor.) .....					
207, 083	Tennyson, Fannie C., Tyler, Tex. Flower-basket .....	Aug. 13, 1878	440	136	14	264
264, 511	Terrass, John, assignor to William H. Cook, Akron, Ohio. Broom-rack .....	June 4, 1878	84	29	13	1024
204, 396	Terrell, Enoch P., and Lucian A. Williams, West Liberty, Ohio: said Terrell assignor to said Williams. Loom-picking mechanism .....	May 28, 1878	1262	360	13	1003
210, 578	Terrell, Enoch P., Bellefontaine, Ohio. Animal-trap .....	Dec. 3, 1878	209	55	14	850
206, 505	Terrell, Henry D., Starsville, Ga. Scraper attachment for shovel-plows .....	July 30, 1878	1203	345	14	177
209, 432	Terrill, Anderson W., Mexico, Mo. Excavator .....	Oct. 29, 1878	1078	313	14	654
	Terrill, A. W. ( <i>See</i> Fleming, Wayland & Gilliland, assignors.) .....					
	Terrill, Thomas B., <i>et al.</i> ( <i>See</i> Baylow, Charles, assignor.) .....					
209, 089	Terry, Charles H., and William W. Green, jr., Chicago, Ill. Picket-fence .....	Oct. 15, 1878	701	203	14	593
200, 881	Terry, Daniel M., Jersey City, N. J. Steam vacuum-pump .....	Mar. 5, 1878	66	23	13	425
209, 040	Terry, John Bostwick, assignor of one-half interest to Sewall D. Thompson, Ithaca, N. Y. Folding table .....	Nov. 12, 1878	438	133	14	743
204, 262	Terry, J. Rufus, jr., New York, N. Y. Hat and cap sweat .....	May 28, 1878	1127	322	13	980
200, 584	Terry, Sidney C., assignor of one-half interest L. J. Brown, Augusta, Mich. Ironing-table .....	Feb. 19, 1878	711	209	13	358
202, 484	Terwilliger, Stephen Shafer, Tie Siding, Wyo. Sulky-scraper .....	Apr. 16, 1878	666	195	13	701
	Terwilliger, Silas. ( <i>See</i> Mase & Terwilliger.) .....					
208, 347	Teste, Anatole, sr., Lyons, France. Umbrella .....	Sept. 24, 1878	841	245	14	468
	Teter, L. ( <i>See</i> Whitney, Bennet, assignor.) .....					
201, 275	Teter, William L., Philadelphia, Pa. Flour-bolt .....	Nov. 20, 1878	824	243	14	802
	Tetlow, William, <i>et al.</i> ( <i>See</i> Hyde, Daniel, assignor.) .....					
207, 913	Tetu, David H., South Point, Quebec, Canada. Fish-drier .....	Sept. 10, 1878	355	108	14	397
198, 824	Tevia, Edwin Lawrence, Philadelphia, Pa. Horseshoe .....	Jan. 1, 1878	102	29	13	24
200, 359	Tew, William A., Lima, Ohio. Car-coupling .....	Feb. 12, 1878	460	141	13	315
201, 720	Thairlwall, William C., Boston, Mass. Car brake and starter .....	Mar. 26, 1878	942	289	13	570
203, 070	Thaler, Henry L., Deep River, Conn. Manufacture of augers .....	Apr. 30, 1878	1323	385	13	795
206, 645	Thaler, Richard M., New York, N. Y. Churn .....	July 30, 1878	1347	327	14	194
204, 397	Thatcher, John M., Jersey City, N. J. Sewer-trap .....	May 28, 1878	1203	360	13	1003
210, 726	Thaxton, Parham B., Jerseyville, assignor to self and A. C. Palmer, Jacksonville, Ill. Road-scraper .....	Dec. 10, 1878	373	102	14	889
210, 372	Thayer, Alexander S., Milton, Ind. Grain-separator .....	Nov. 26, 1878	934	272	14	816
	Thayer, Barton D. ( <i>See</i> Henthorn & Thayer.) .....					
204, 398	Thayer, Edward S., Salem, Mass. Compound for currying leather .....	May 28, 1878	1266		13	1003
200, 358	Thayer, Frederick W., Waverly, Mass. Mask .....	Feb. 12, 1878	470	141	13	315
	Thayer, Hiram H. ( <i>See</i> Smith & Thayer.) .....					
201, 062	Thayer, Leonard E., Lansing, Mich. Thill-coupling .....	Apr. 2, 1878	99	28	13	613
207, 006	Thickston, John C., and Hiram G. Fouts, Salem, Ohio. Bag-fastener .....	Sept. 10, 1878	443	133	14	408
201, 132	Thiebold, George, Newark, N. J., assignor of one-half interest to Charles B. Smith and Benjamin A. Bourne, Hartford, Conn. Gig-saddle tree .....	Mar. 12, 1878	317	97	13	469
198, 781	Thickett, John, Chicago, Ill. Meat-bin .....	Jan. 1, 1878	64	16	13	17
	Thickstun, John A., <i>et al.</i> ( <i>See</i> Macy, Charles R., assignor.) .....					
205, 443	Thierman, John Henry, Louisville, Ky. Process for flavoring liquors .....	June 25, 1878	1092	323	13	1168

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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202, 678	Thilmany, Waldemar, Cleveland, Ohio. Preserving timber .....	Apr. 23, 1878	906	.....	13	737
	Thole, Bernard. (See Reden & Thole.)					
	Thomas, Abner B., et al. (See Ewart, William D., assignor.)					
206, 506	Thomas, Alexander, Ledyard, N. Y. Grain-separator .....	July 30, 1878	1203	346	14	177
190, 179	Thomas, Amos W., Philadelphia, Pa. Dress-train supporter .....	Jan. 15, 1878	475	140	13	90
203, 958	Thomas, Benjamin M., Brooklyn, assignor to Neuss, Hesselein & Co., New York, N. Y. Needle-wrapper .....	May 21, 1878	785	225	13	939
	Thomas, C. Lewis, et al. (See Becker, Leander, assignor.)					
	Thomas Clock Company, Seth. (See Ager, George, assignor.)					
202, 605	Thomas, David, assignor of six-tenths interest to William L. Reynolds and Frederick W. E. Best, Saint Louis, and Charles D. Moody, Saint Louis County, Mo. Cupola-furnace and process of working iron .....	Apr. 16, 1878	807	233	13	716
201, 069	Thomas, David H., assignor of one-half interest to John D. Gray, Syracuse, N. Y. Machine for skiving stiffeners for boots and shoes .....	Mar. 5, 1878	247	78	13	452
207, 914	Thomas, David H., New York, N. Y. Cooking-range .....	Sept. 10, 1878	356	108	14	397
203, 444	Thomas, David S., Powell, Ohio. Bee-hive .....	June 25, 1878	1093	{ 323 324 }	{ 13 13 }	{ 1168 1168 }
207, 092	Thomas, Eddy T., New York, N. Y., assignor to Gold Medal Sewing Machine Company, Orange, Mass. Braid-guide for sewing-machines .....	Sept. 3, 1878	108	32	14	362
	Thomas, Ellen C. (See Thomas, John S., assignor.)					
202, 385	Thomas, Evan, Jackson, N. C. Umbrella-holder for vehicles .....	Apr. 16, 1878	571	167	13	688
	Thomas, Franklin G. (See McBrayer & Thomas.)					
	Thomas, George. (See Collins & Thomas.)					
	Thomas, Henry W. C. (See Smith & Thomas.)					
209, 090	Thomas, Henry W. C., and Salathiel H. Knox, Springfield, Ohio. Hitching-post .....	Oct. 15, 1878	702	203	14	593
208, 213	Thomas, John F., Ilion, N. Y. Dummy-engine .....	Sept. 17, 1878	682	201	14	445
207, 460	Thomas, John J., deceased, by Sarah Thomas, administratrix, Youngstown, Ohio. Lamp .....	Aug. 27, 1878	860	254	14	326
190, 879	Thomas, John S., assignor to Ellen C. Thomas, Fort Worth, Tex. Jail-cell .....	Jan. 20, 1878	1209	355	13	220
210, 177	Thomas, John W., Tyrone, Pa. Sash-fastener .....	Nov. 19, 1878	695	207	14	781
201, 721	Thomas, Joseph C., Milroy, Ind. Shelf-step or bracket .....	Mar. 26, 1878	946	290	13	570
203, 216	Thomas, Madison C., La Fayette, Va. Horse-detachor .....	Apr. 30, 1878	1467	429	13	813
206, 152	Thomas, Nicholas, Chicago, Ill. Truck for moving railway-axes, &c. ....	July 16, 1878	769	220	14	114
208, 214	Thomas, Richard J., Milwaukee, Wis. Stop-valve .....	Sept. 17, 1878	686	202	14	445
204, 633	Thomas, Samuel B., Arcanum, Ohio. Hog-weighing device .....	June 4, 1878	209	67	13	1042
	Thomas, Sarah, administratrix. (See Thomas, John J., deceased.)					
200, 390	Thomas, Septimus, Philadelphia, Pa. Ore-separator .....	Feb. 12, 1878	481	142	13	315
201, 207	Thomas, Squire, Junction City, Oreg. Horse-power .....	Mar. 12, 1878	388	120	13	480
207, 084	Thomas, Thomas, Pittsburg, Pa. Machine for threading bolts .....	Aug. 13, 1878	440	130	14	204
210, 822	Thomas, Walter, Geneseo, Ill. Folding table .....	Dec. 10, 1878	472	133	14	894
210, 821	Thomas, William, Jersey City, N. J. Vent for barrels and kegs .....	Dec. 10, 1878	470	133	14	894
203, 092	Thomas, William Harvey, and Thomas Henry Carter, Mount Sterling, Ky. Rain-water filter .....	Apr. 30, 1878	1335	388	13	797
190, 481	Thomas, William Howard, Way Cross, Ga. Cultivating implement .....	Jan. 22, 1878	789	232	13	147
200, 848	Thompson, Actor P., assignor to D. P. Boynton, Monmouth, Me. Bench-vise .....	Mar. 5, 1878	35	12	13	420
	Thompson, Benjamin T., et al. (See Cutler, Henry, assignor.)					
	Thompson, C., et al. (See Harrison, Theophilus, assignor.)					
207, 569	Thompson, Charles H., Newburyport, Mass., assignor of one-half interest to P. Conkling, Saratoga Springs, N. Y. Car-roof .....	Aug. 27, 1878	978	288	14	341
	Thompson, Charles L. (See Thornton, William M. K., assignor.)					
198, 825	Thompson, Clark W., Wells, Minn. Barrel-hoop machine .....	Jan. 1, 1878	103	29	13	24
199, 385	Same..... Truss-hoop .....	Jan. 22, 1878	698	205	13	132
202, 073	Same..... Machine for making barrel-hoops .....	Apr. 2, 1878	212	62	13	629
203, 509	Same..... Machine for goring veneers for barrels .....	May 7, 1878	283	81	13	859
205, 923	Same..... Machine for making barrels .....	July 9, 1878	510	145	14	77
202, 829	Thompson, Clinton, Graham, Mo. Washing-machine .....	Apr. 23, 1878	1127	324	13	706
8, 072	Thompson, Edward H., assignor to W. A. Amberg, Starke, Fla. Temporary binder. (Reissue) .....	Feb. 5, 1878	233	71	13	269
	Thompson, Edwin C., Williamsburg, N. Y. Photographic studio .....	Dec. 10, 1878	290	80	14	870
210, 645	Thompson, Elizabeth. (See Ruggles, Stephen P., assignor.)					
200, 779	Thompson, Ethan O., Philadelphia, Pa. Tailor's measuring-tool .....	Feb. 26, 1878	928	273	13	399
198, 862	Thompson, George W., Brooklyn, assignor of one-fourth interest to Jacob Cohen, New York, N. Y. Gas-regulator .....	Jan. 1, 1878	140	40	13	30
	Thompson, Henry. (See Allen, William J., assignor.)					
204, 175	Thompson, Henry, Providence, R. I. Repeating-clock .....	May 28, 1878	1093	{ 294 295 }	{ 13 13 }	{ 974 974 }
200, 488	Thompson, Henry Ernst, jr., Pittsfield, Mass. Temporary binder .....	Feb. 19, 1878	615	181	13	344
	Thompson, Henry G. (See Brewer, Roland L., assignor.)					
8, 487	Thompson, Henry G., Milford, Conn., assignor to Henry G. Thompson, as trustee of Magnetic Lasting Machine Association. Lasting-machine .....	Nov. 12, 1878	454	138	14	745
203, 673	Thompson, Henry G., Milford, Conn. Lasting-machine. (Reissue) .....	May 14, 1878	471	134	13	891
208, 127	Thompson, Henry G., Milford, Conn., assignor to self, trustee. Lasting mechanism for boots and shoes .....	Sept. 17, 1878	589	175	14	433
211, 065	Thompson, Horace W., Bellows Falls, Vt. Scythe-snath fastening .....	Dec. 17, 1878	782	215	14	940
	Thompson, Jane. (See Brock, William E., assignor.)					
199, 123	Thompson, Jesse G., Clarion, Pa. Turbine water-wheel .....	Jan. 8, 1878	415	122	13	80
203, 508	Thompson, J. Howard. (See Hilton, Charles William, assignor.)					
207, 320	Thompson, John F., Cleveland, Ohio. Vehicle-spring .....	May 7, 1878	282	81	13	859
	Thompson, John H., assignor to self and William H. Hager, Grand Junction, Iowa. Railway cross-tie .....	Aug. 20, 1878	697	208	14	301
206, 201	Thompson, John W., Greenfield, Mass. Blackboard attachment .....	July 23, 1878	843	240	14	127
208, 438	Thompson, John W., Clermont County, Ohio. Corn-marker .....	Sept. 24, 1878	934	274	14	480
	Thompson, Joseph N. (See Thompson, Robert C. and Joseph N.)					
8, 432	Thompson, Joseph W., Salem, Ohio, assignor to self and Buckeye Engine Company. Valve-gear for steam-engines .....	Sept. 24, 1878	961	281	14	483
8, 433	Same..... same .....	Sept. 24, 1878	963	282	14	483
8, 434	Same..... Balanced and cut-off valve .....	Sept. 24, 1878	964	282	14	483
204, 924	Thompson, Joseph W., and Nathan Hunt, assignors of one-half interest to Buckeye Engine Company, Salem, Ohio. Governor .....	June 18, 1878	160	13	1092	
200, 414	Thompson, Knud, and Lars G. Bergstrom, Norwalk, Ohio. Rocking-chair fan-attachment .....	Feb. 19, 1878	543	160	13	332
202, 202	Thompson, Lucius, San Francisco, Cal. Napkin-holder .....	Apr. 9, 1878	367	107	13	655
	Thompson, Marshall C. (See King, George D., assignor.)					
204, 293	Thompson, Merritt L., Brooklyn, N. Y. Moth-proof barrel and box .....	May 28, 1878	1128	322	13	986
207, 015	Thompson, Nathan, Brooklyn, N. Y. Sash-fastener .....	Sept. 10, 1878	357	108	14	397

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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204, 399	Thompson, N. C. (See McGregor, William, assignor.)					
	Thompson, Orrin B., Jersey, Ohio. Adjustable axle-vent .....	May 28, 1878	1266	361	13	1003
	Thompson, Perley & Waite. (See Griffin, Henry H., assignor.)					
	Same..... (See Nichols, John, assignor)..... (Reissue.)					
	Thompson, Perley & Waite, et al. (See Nichols, John, assignor.)					
	Thompson, Perley & Waite. (See Perley, Charles A., assignor.)					
	Same..... (See Tenney & Hobbs, assignors)..... (Reissue.)					
198, 907	Thompson, Robert C. and Joseph N., Bonham, Tex. Cotton-press .....	Jan. 1, 1878	192	54	13	28
201, 567	Thompson, Robert W., Cleveland, Ohio. Wagon-top .....	Mar. 19, 1878	577	{ 177 178 }	13	513
	Thompson, Salathiel S. (See Smith & Thompson.)					
204, 264	Thompson, Salathiel S., assignor to Robert Hornback and Richard Coss, Sacramento, Cal. Ventilator .....	May 28, 1878	1128	323	13	966
8, 483	Thompson, Samuel R., Boston, Mass., assignor, by mesne assignments, to William C. McKean, George H. Jackson, and Jefferson Brown, Jr. Bushing for faucet-holes .....	Nov. 12, 1878	451	137	14	745
200, 361	Thompson, Samuel R., Brookline, Mass. Bark-cutting machine .....	Feb. 12, 1878	482	142	13	315
	Thompson, Sewall D. (See Terry, John Bostwick, assignor.)					
200, 675	Thompson, Smith, Washington, D. C. Bill-file .....	Feb. 26, 1878	824	{ 242 243 }	13	383
202, 485	Thompson, Thomas C., Evanston, Ill. Gaff for vessels .....	Apr. 10, 1878	667	195	13	702
201, 208	Thompson, Thomas H., Benson, Minn. Trace trimming and creasing machine .....	Mar. 12, 1878	388	120	13	481
203, 217	Thompson, Thomas P., Portage, Wis. Well-borer .....	Apr. 30, 1878	1467	429	13	814
205, 924	Thompson, William, Jonathan Dickey, and Noah P. Watts, Holton, Ind. Circular-saw mill .....	July 9, 1878	513	145	14	77
	Thompson, William P. (See Stout, Charles, assignor.)					
207, 907	Thomson, Benjamin L., London, and Thomas Connolly, Kingsland, England. Sheathing vessels .....	Sept. 10, 1878	444	133	14	409
	Thomson, Frank M. (See Thomson, Polydore and Frank M.)					
209, 941	Thomson, George B., Saint Louis, Mo. Check-roin attachment .....	Nov. 12, 1878	439	133	14	743
204, 512	Thomson, James C., Barnhart Mills, Pa. Vacuum-packer for oil-wells .....	June 4, 1878	85	29	13	1024
202, 890	Thomson, Judson L., New York, and James Naylor, Jr., Rochester, N. Y.; said Naylor assignor to said Thomson; said Thomson assignor of one-half interest to Christian Feigenspan, Newark, N. J. Paper barrel .....	Apr. 23, 1878	1128	324	13	706
210, 579	Thomson, Polydore and Frank M., Jersey City, N. J. Mail-bag .....	Dec. 3, 1878	210	55	14	830
200, 230	Thomson, Robert Benjamin, Danville, Mich. Colter-holder for plows .....	Feb. 12, 1878	344	103	13	294
209, 942	Thomson, William, Glasgow, Scotland. Reflecting galvanometer .....	Nov. 12, 1878	439	134	14	743
210, 066	Thomson, William, Glasgow, North Britain. Mariner's compass .....	Nov. 19, 1878	584	175	14	706
210, 067	Same..... Deep-sea-sounding apparatus .....	Nov. 19, 1878	586	{ 175 176 }	14	706
210, 068	Same..... Device for taking azimuths .....	Nov. 19, 1878	589	176	14	707
210, 069	Same..... Mariner's compass .....	Nov. 19, 1878	590	176	14	707
	Thorn, Edwin, et al. (See Holub, Frank, assignor.)					
208, 937	Thorn, Theodore, Saint Clair, Pa. Shutter-blower .....	Oct. 15, 1878	531	156	14	571
	Thornburg, Lewis, et al. (See Wroth, Lafayette, assignor.)					
204, 862	Thorne, George L., Buffalo, N. Y. Portable heater .....	June 11, 1878	459	134	13	1076
203, 567	Thornton, James, Wellsville, N. Y. Vehicle-spring .....	May 14, 1878	370	105	13	879
	Thornton, John J., et al. (See Evans, Louis, assignor.)					
198, 908	Thornton, Jonathan T., Providence, R. I. Securing artificial teeth on aluminum plates .....	Jan. 1, 1878	193	54	13	38
202, 606	Thornton, William H., and Alfred Beam, New Britain, Conn. Rubber butt-plate for guns .....	Apr. 16, 1878	809	234	13	717
209, 992	Thornston, William M. K. assignor of three-eighths interest to Charles L. Thompson, Saint Louis, Mo. Locomotive smoke-stack and spark-arrester .....	Nov. 19, 1878	505	153	14	756
206, 277	Thorpe, John, Fort Miller, N. Y. Rotary boiler for boiling and steaming paper-stock .....	July 23, 1878	927	262	14	139
208, 439	Thorpe, Vincent, Fall River, Mass. Divided wheel .....	Sept. 24, 1878	935	274	14	480
209, 727	Thorwarth, John B., and Mike Harrison, Brooklyn, N. Y. Lock for spinning-fliers .....	Nov. 5, 1878	206	61	14	708
200, 107	Threlfall, Lazarus, Colne, England. Door-spring .....	Feb. 5, 1878	218	67	13	266
	Thrift, William Hamilton. (See Dutot & Thrift.)					
199, 670	Throop, Gardner E., Auburn, N. Y. Grain-scouring apparatus .....	Jan. 27, 1878	1016	296	13	190
205, 318	Thunen, William, Cheroke, Cal. Vehicle-wheel .....	June 25, 1878	965	286	13	1152
	Thurber, Milton R. (See Harvey & Thurber.)					
202, 486	Thurston, Alfo L., West Salem, Wis. Coin pocket-book .....	Apr. 16, 1878	067	196	13	702
202, 386	Thurston, Henry W., Cambridge, assignor to J. W. Fairbanks, Waltham, Mass. Net-ting-machine .....	Apr. 16, 1878	572	168	13	688
200, 849	Thurston, James R., Brooklyn, N. Y. Extension-table .....	Mar. 5, 1878	36	12	13	420
204, 774	Thurston, Samuel H., Bloomfield, N. J., assignor to Charles T. Pierson, Ramapo, N. Y. Tobacco-pipe .....	June 11, 1878	368	110	13	1066
	Tibbe, Anton. (See Tibbe, Henry, assignor.)					
205, 816	Tibbe, Henry, assignor to self and Anton Tibbe, Washington, Mo. Pipe .....	July 9, 1878	309	114	14	63
201, 467	Tichenor, James M., Irvington, and Henry L. Dexter, Roselle, N. J. Lifting-jack .....	Mar. 19, 1878	677	206	13	527
	Tiebout, J. (See Whaley, Barnett B., assignor.)					
205, 012	Tiernan, Richard Hencese, Galveston, Tex. Grain-drier .....	June 18, 1878	634	186	13	1103
204, 863	Tiesing, Frank W., New Haven, Conn. Magazine fire-arm .....	June 11, 1878	460	134	13	1076
206, 367	Same..... same .....	July 23, 1878	1037	{ 297 298 }	14	152
208, 128	Same..... same .....	Sept. 17, 1878	592	{ 175 176 }	14	433
198, 757	Tiffany, Eli, assignor of one-half interest to Charles Cooper, Bennington, Vt. Knit-ting-machine .....	Jan. 1, 1878	29	7, 8, 9	13	13
201, 131	Tiffany, Oscar F., Syracuse, N. Y. Fruit-drier .....	Mar. 12, 1878	316	97	13	460
	Tift, John V., executor. (See Tift & Love)..... (Reissue.)					
8, 047	Tift, Joseph N., deceased (John V. Tift and William Bryant, executors), and William Love, Buffalo, N. Y. Valve-gear for steam-engines .....	Jan. 22, 1878	936	273	13	170
	Tilden, J. N., et al. (See Willcox, William H., assignor.)					
206, 278	Tildesley, Joseph, Lockport, N. Y. Mower .....	July 23, 1878	928	263	14	139
	Tillinghast, John W. (See Luther, Benjamin G., assignor.)					
	Tillinghast, Joseph O. (See Alger, Darius, assignor.)					
208, 348	Tillinghast, William T., Boston, Mass. Printer's galley .....	Sept. 24, 1878	842	245	14	468
207, 370	Tillotson, Charles N. (See Tomey & Tillotson.)					
	Tillotson, James K., Elmira, N. Y. Heel for boots and shoes .....	Aug. 27, 1878	763	227	14	315
8, 415	Tillotson, Joseph. (See Wood, Lucius A., assignor.)					
209, 043	Tilton, Joseph, New York, N. Y. Spring side-bar for vehicles .....	Sept. 17, 1878	606	203	14	445
209, 726	Tilton, Ole, Pittsburg, R. Oil-still .....	Nov. 12, 1878	442	134	14	744
	Tilton, William F., McHenry, assignor of one-half interest to Charles A. Taylor, Chi- cago, Ill. Device for cutting washers .....	Nov. 5, 1878	206	61	14	768

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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203, 674	Timby, Benjamin Johnson, assignor to self and David P. Hooker, Ridgeway, N. Y. Composition for protecting trees.	May 14, 1878	473	.....	13	892
200, 415	Timmersmann, Henry, Muscatine, Iowa. Corn-planter.	Feb. 10, 1878	544	161	13	333
207, 998	Timmons, Henry, sr. (See Stough, Charles B., assignor.)					
209, 944	Timms, James, assignor of one-half interest to A. J. Morris, Malta, Ohio. Changeable-gauge truck.	Sept. 10, 1878	445	133	14	409
200, 108	Tingley, John, Philadelphia, Pa. Boot and shoe heel.	Nov. 12, 1878	443	134	14	744
200, 108	Tinker, Edwin. (See Webb & Tinker.)					
205, 013	Tinnerholm, Charles J., Brooklyn, assignor, by mesne assignments, to Hammonasset Sole Leather Company, New York, N. Y. Tanning compound.	Feb. 5, 1878	219	.....	13	267
205, 013	Tinney, John D., et al. (See Jingle, August, assignor.)					
205, 013	Tipton, David. (See Reicherts & Tipton.)					
205, 013	Tipton, William, assignor of one-half interest to John Fisher, Harrisonville, Ohio. Wool-press.	June 18, 1878	635	187	13	1103
204, 057	Tirrell, Jacob P., Somerville, Mass. Electric gas-lighting apparatus.	July 10, 1878	661	191	14	102
209, 148	Tirrell, James. (See Mudge & Whittaker, assignors.)					
207, 085	Tisdale, Charles D., Boston, Mass. Electric railway-signal.	Oct. 22, 1878	783	227	14	609
204, 634	Tise, Jacob C., and John H. Kester, Winston, N. C. Churn.	Aug. 13, 1878	441	136	14	264
201, 301	Titcomb, Frederick A., Chicago, Ill. Cigar-box.	June 4, 1878	210	67	13	1042
200, 109	Tittle, Christopher C., assignor of one-half interest to W. B. Sheppard, Cincinnati, Ohio. Flour and meal scoop, measure, and sieve.	Mar. 12, 1878	493	152	16	495
210, 225	Titus, George M., assignor of one-half interest to William W. Brown, Rock Falls, Ill. Harrow.	Feb. 5, 1878	220	68	13	267
201, 851	Titus, George M., Rock Falls, Ill. Corn-planter.	Nov. 20, 1878	772	229	14	795
208, 050	Titus, Ivor R., Huntington, W. Va. Car-axle box.	Mar. 26, 1878	1078	328	13	589
208, 050	Titus, John, North Hempstead, N. Y. Apparatus for transmitting and converting motion.	Sept. 17, 1878	514	153	14	423
210, 169	Titus, John C. (See Huber, Titus, Durfee & Swinnerton.)					
210, 168	Titus, John C., Marion, Ohio. Pump.	Nov. 19, 1878	697	207	14	782
206, 368	Titus, Luther H., San Gabriel, Cal. Portable ladder for gathering fruit.	Nov. 19, 1878	696	207	14	781
208, 548	Titus, Nathaniel J., assignor of one-half interest to L. A. Bigelow and W. L. Smith, Portland, N. Y. Harvester.	July 23, 1878	1039	298	14	152
204, 691	Tivet, Edward, Philadelphia, Pa. Producing leather from sheep's stomachs.	Oct. 1, 1878	90	.....	14	501
206, 369	Tobin, Edmund, jr., Oconto, Wis. Sash holder and lock.	June 11, 1878	277	86	13	1055
210, 170	Tobin, Eliza, et al. (See Moore, William D., assignor.)					
206, 369	Todd, Henry B., West Meriden, Conn. Sad-iron.	July 23, 1878	1040	298	14	152
210, 373	Todd, James, Springfield, Ohio. Wringer.	Nov. 19, 1878	607	208	14	782
8, 310	Todd, James, et al. (See Way, Thomas R., assignor.)					
210, 373	Todd, Lyman I., Chicago, Ill. Rumbler for cleaning castings.	July 2, 1878	270	80	14	42
199, 124	Todd, Warner W., and Henry M. Tschudy, Philadelphia, Pa. Railway-switch.	Nov. 26, 1878	936	273	14	816
206, 788	Toepperwein, Emil Albrecht Ferdinand, Boerne, Tex. Adjustable hammer for fire-arms.	Jan. 8, 1878	416	122	13	80
203, 753	Togge, William, Lyons, N. Y. Clover-separator.	May 14, 1878	593	166	13	907
201, 102	Toland, Jacob M., Jonesborough, Ga. Baling-press.	Aug. 6, 1878	96	31	14	219
199, 125	Toley, James, Montreal, Quebec, Canada. Water-filter.	Mar. 12, 1878	285	88	13	405
198, 782	Tolhurst, William H., Troy, N. Y. Centrifugal machine.	Jan. 8, 1878	417	122	13	81
198, 783	Tolles, Robert B., Boston, Mass. Microscope.	Jan. 1, 1878	65	16	13	17
210, 884	Tolles, Robert B., Boston, Mass. Microscope.	Jan. 1, 1878	66	10, 17	13	17
205, 772	Tolley, Frederick W., assignor of one-third interest to Samuel Stephens, Coxsackie, N. Y. Cultivator.	Dec. 17, 1878	555	156	14	913
211, 066	Tollner, Charles. (See Cornell & Tollner.)					
205, 772	Tollner, Charles, Pulaski, N. Y. Box.	July 9, 1878	347	100	14	56
209, 945	Tomkins, Cornelius T., Hillsborough, New Brunswick, Canada. Preparing gypsum for use in paper-making.	Dec. 17, 1878	782	215	14	940
209, 945	Tomlinson, Frederick C. (See Scott, Nelson T., assignor.) (Reissue.)					
209, 632	Tompkins, Cornelius B., Elmira, N. Y. Harrow.	Nov. 12, 1878	444	134	14	744
205, 152	Tongue, Francis J., Chicago, Ill. Galvanic piles for medical purposes.	Nov. 5, 1878	105	31	14	695
209, 525	Tonkin, John J., assignor of one-half interest to John N. Van Lew, Richmond, Va. Gage-cock.	June 18, 1878	778	230	13	1122
8, 267	Tonkin, John J., assignor of one-half interest to John N. Van Lew, Richmond, Va. Gage-cock.	Oct. 29, 1878	1170	341	14	668
202, 891	Tooker, Robert N., Chicago, Ill. Fire-alarm signal-box.	May 28, 1878	1301	370	13	1048
208, 865	Toomey, Patrick J., Syracuse, N. Y. Cooking utensil.	Apr. 23, 1878	1129	325	13	706
201, 722	Toopham, William H., Springfield, Mass. Combined box and globe.	Oct. 8, 1878	444	129	14	555
199, 238	Torney, Wellington, and Charles N. Tillotson, Detroit, Mich. Sewer-trap.	Mar. 26, 1878	947	290	13	570
210, 646	Tornquist, Alfred, New York, assignor to Rufus Dutton, Yonkers, N. Y. Pitman-connection.	Jan. 15, 1878	538	159	13	100
211, 067	Tornwall, John Alfred, Okolona, Miss. Fence.	Dec. 10, 1878	291	80	14	870
205, 512	Torrey, Joseph R., Worcester, Mass. Razor-strop.	Dec. 17, 1878	783	215	14	940
209, 306	Torwegge, Frederick W., Saint Louis, Mo. Hat-tip.	July 2, 1878	52	15	14	15
210, 647	Totthammer, Hans Peter, San Francisco, Cal. Loading and unloading ships.	Oct. 22, 1878	935	273	14	630
206, 406	Totthill, William S., Chicago, Ill. Swing.	Dec. 10, 1878	292	80	14	870
205, 513	Tough, George C., Bay City, Mich. Chain-wheel.	July 30, 1878	1097	313	14	163
210, 226	Tourne, Eugene, New Orleans, La. Device for regulating the flow of gas.	July 2, 1878	53	16	14	16
207, 831	Towell, Isaac. (See Harding & Towell.)	Nov. 26, 1878	772	229	14	795
200, 950	Tower, George B. N., Cambridge, assignor of one-half interest to Lydie F. Renshaw, Cohasset, Mass. Steam-generator.	Sept. 10, 1878	263	82	14	386
208, 549	Tower, John J., and Henry W. Kablke, Brooklyn, N. Y., assignors to said John J. Tower. Handcuff.	Mar. 5, 1878	127	42	13	435
209, 441	Town, Byron, Fond du Lac, Wis. Grain-drill attachment.	Oct. 1, 1878	91	27	14	501
199, 126	Town, Calvin E., Washington, D. C. Overshoe sandal or boot.	Nov. 12, 1878	337	101	14	730
200, 156	Town, Edwin, Wilmington, Del. Screw-propeller.	Jan. 8, 1878	418	123	13	81
206, 646	Towne, Henry R., and Thomas F. Keating, assignors to Yale Lock Manufacturing Company, Stamford, Conn. Prison-lock.	Feb. 12, 1878	275	82	13	284
202, 892	Towne, Henry R., assignor to Yale Lock Manufacturing Company, Stamford, Conn. Master-key device for post-office boxes.	July 30, 1878	1347	388	14	104
203, 950	Towner, B. H. (See Hannersperger, Peter, assignor.)					
202, 892	Towns, Elson, Cism, Ill. Governor.	Apr. 23, 1878	1130	325	13	706
202, 074	Townsend, Cyrus Mercer, Standing Rock, Dak. Corn-husking glove.	May 21, 1878	785	225	13	930
8, 088	Townsend, Edward E., assignor of one-third interest to Hercule Dansrean, Thibodeaux, La. Lamp-burner.	Apr. 2, 1878	213	62	13	620
206, 279	Townsend, Louis, Terre Haute, Ind., assignor to Chester Guild, Boston, Mass. Leather boarding and graining machine.	Feb. 19, 1878	720	214	13	361
207, 722	Trabue, William, Louisville, Ky. Magazine fire-arm.	July 23, 1878	930	263	14	139
207, 722	Trabue, William, Louisville, Ky. Magazine fire-arm.	Sept. 3, 1878	200	61	14	374



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210, 374	Trabue, William, Louisville, Ky. Cartridge.....	Nov. 26, 1878	937	273	14	816
	Tracy, Edward. (See Truland, William L., assignor.)					
	Tracy, Edward F., et al. (See Roberts, Edward J., assignor.)					
	Tracy, Emma. (See Pitt, William A., assignor.)					
	Tracy, Frank. (See Dillon & Tracy.)					
205, 319	Tracy, James, Waltham, Mass. Balloon.....	June 25, 1878	967	286	13	1152
	Tracy, John N. (See Tracy, Thomas and John N.)					
202, 302	Tracy, Thomas and John N., New Britain, Conn. Bed-bottom.....	Apr. 9, 1878	468	137	13	609
207, 999	Tracy, Wayne B., Philadelphia, Pa. Rod-clamping device for walking-beams of oil-pumps.....	Sept. 10, 1878	446	134	14	409
210, 476	Trageser, John, New York, N. Y. Connecting "spute" to boilers.....	Dec. 3, 1878	89	22	14	855
200, 951	Tragheim, Simon, assignor to David S. Ritterband, New York, N. Y. Screw-propeller.....	Mar. 5, 1878	127	42	13	435
200, 453	Trask, Charles H., Lynn, Mass. Car-coupling.....	Oct. 29, 1878	1079	313	14	654
204, 265	Traut, Jacob F., Detroit, Mich. Spectacle-frame.....	May 28, 1878	1129	323	13	986
204, 266	Same..... Eyeglass.....	May 28, 1878	1150	323	13	986
206, 507	Traut, Justus A., New Britain, Conn. Bench-plane.....	July 30, 1878	1204	346	14	177
210, 439	Trautmann, Ralph, New York, N. Y. Package-band.....	Dec. 3, 1878	52	12	14	851
206, 058	Travers, Vincent Paul, New York, N. Y. Rope.....	July 16, 1878	663	191	14	102
	Travis, Charles L. (See Olmsted, Travis & Chute.)					
205, 442	Travis, Charles L., and Charles R. Chute, Minneapolis, Minn. Grain-binder.....	June 25, 1878	1091	323	13	1168
209, 140	Travis, Charles L., Minneapolis, Minn. Grain-binder.....	Oct. 22, 1878	784	228	14	602
202, 075	Travis, John N., Owatonna, Minn. Draft-equalizer.....	Apr. 2, 1878	214	63	13	629
8, 519	Travis, Joseph H., New York, N. Y., assignor to M. and H. Schrenkeisen. Covering for chairs, &c. (Reissue.).....	Dec. 10, 1878	484	.....	14	896
203, 093	Travis, Loren L., Lemon, Pa. Automatic wagon-brake.....	Apr. 30, 1878	1336	368	13	757
202, 607	Travis, Thomas W., assignor of one-half interest to John A. Pollock, Philadelphia, Pa. Railway-track.....	Apr. 16, 1878	800	234	13	717
206, 647	Travis, Thomas W., assignor to self, John A. Pollock, and James G. Carson, Philadelphia, Pa. Railway-track.....	July 30, 1878	1348	368	14	194
202, 679	Traxler, Frederick K., Dansville, N. Y. Dog-power.....	Apr. 23, 1878	906	259	13	757
	Treat, Bryan A. (See Parmelee & Treat.)					
201, 037	Treat, James E., Boston, Mass. Indicator for pressure-gages.....	Mar. 26, 1878	871	265	13	558
	Treat, William W. (See Rich, Shebnah, assignor.)					
205, 153	Tregent, Alexander N., Detroit, Mich. Steam water-heater.....	June 18, 1878	779	230	13	1122
201, 466	Tregoning, John, and Michael Hastings, Brooklyn, N. Y. Pump-valve.....	Mar. 10, 1878	678	207	13	528
203, 218	Treman, Lafayette L., Ithaca, N. Y. Meat-tenderer.....	Apr. 30, 1878	1468	429	13	814
201, 209	Trenholm, Francis H., Charleston, S. C. Cart-body.....	Mar. 12, 1878	389	120	13	461
202, 680	Trent, John, Mayo Forge, Va. Composition for treating tobacco.....	Apr. 23, 1878	907	.....	13	738
	Trenton Lock and Hardware Company. (See Gérard, John, assignor.)					
205, 514	Tresch, Michael J., and Henry F. Urey, Edensburg, Pa. Sash-balance.....	July 2, 1878	53	16	14	16
206, 059	Tresilian, Thomas, Gloucester, Mass. Hammock-eye.....	July 16, 1878	664	192	14	102
205, 154	Trethe, John Q. A., Washington, D. C. Safety-pin.....	June 18, 1878	780	231	13	1122
190, 482	Trethaway, Samuel, Pittsburg, Pa. Machine for rolling and straightening metal bars.....	Jan. 22, 1878	790	232	13	147
204, 393	Same..... Grinding-machine.....	May 28, 1878	1259	359	13	1003
200, 990	Tretz, Nathan, Centre Point, Ind. Nipple-guard for fire-arms.....	Mar. 5, 1878	178	57	13	442
207, 086	Treutler, Gustav Adolph, Blasewitz, near Dresden, Saxony. Continuous preparation of nitrogen gas.....	Aug. 13, 1878	442	.....	14	264
	Treyer, William. (See Rippin & Treyer.)					
203, 796	Trizise, Thomas, assignor of two-thirds interest to Jesse Gilmore, Baltimore, and G. W. Cofran, Mount Winans, Md. Apparatus for hermetically sealing cans.....	May 14, 1878	600	168	13	907
	Trickey, George B., et al. (See Starkey, Dexter, assignor.)					
209, 307	Trickle, Abbie G., Manchester, N. H. Alphabet-block.....	Oct. 22, 1878	936	273	14	630
208, 048	Trickle, John F., North Manchester, Ind. Washing-machine.....	Oct. 1, 1878	197	56	14	515
108, 826	Trimble, George A., Crown Point, N. Y. Folding table.....	Jan. 1, 1878	105	30	13	24
	Trimble, James R. (See Cather, Edwin, assignor.)					
207, 630	Tripler, Archibald B., New York, N. Y. Staining wood.....	Sept. 3, 1878	40	.....	14	355
208, 640	Same..... Preserving wood.....	Oct. 1, 1878	198	57	14	515
200, 806	Tripp, Augustus F., assignor to self, Sidney Shepard, and James G. Forsyth, Buffalo, N. Y. Casing for cans.....	Feb. 26, 1878	954	281	13	403
208, 772	Tripp, David T., Waterloo, Ill. Bee-hive.....	Oct. 8, 1878	340	97	14	541
	Tripp, Frank. (See Soule, Charles W., assignor.)					
205, 014	Tripp, Freeman L., Eau Claire, Wis. Hat-fastener.....	June 18, 1878	636	187	13	1103
208, 000	Tripp, Henry C., Auburn, N. Y., assignor to Samuel S. White, Philadelphia, Pa. Dental chair.....	Sept. 10, 1878	447	134	14	409
	Tripp, Ira B. (See Robinson, Frank H., assignor.)					
200, 362	Tripp, James, Coldwater, Mich. Cotton-harvester.....	Feb. 12, 1878	484	{ 142 } { 143 }	13	315
209, 201	Tripp, James A., and H. M. Ballou, Union Centre, N. Y. Log-turner.....	Oct. 22, 1878	838	242	14	616
204, 113	Tripp, Oscar P., Belvidere, Ill. Tongue and thill support for vehicles.....	May 21, 1878	948	272	13	959
207, 223	Tripp, Seth D., Lynn, Mass. Machinery for skiving boot and shoe counters.....	Aug. 20, 1878	598	{ 180 } { 181 }	14	288
201, 133	Tripp, Thomas, East Stoughton, Mass. Turbine water-wheel.....	Mar. 12, 1878	318	98	13	469
	Tripp, William B., et al. (See Hill, Nathan, assignor.)					
202, 893	Trout, C. C. (See Stouffer, Hiram C., assignor.)					
206, 508	Trow, Charles F., Boston, Mass. Coin-package.....	Apr. 23, 1878	1131	325	13	766
201, 302	Trow, Ezekiel W., Newport, Vt. Churn.....	July 30, 1878	1205	346	14	177
	Trowbridge, Charles E., assignor to self and Arthur F. Whitin, Whitinsville, Mass. Spinning-ring.....	Mar. 12, 1878	493	152	16	495
207, 693	Trowbridge, Charles E., Whitinsville, Mass. Adjusting device for spinning-rings and their holders.....	Sept. 3, 1878	108	33	14	363
200, 631	Trowbridge, John, Cambridge, Mass. Telephone.....	Feb. 26, 1878	774	228	13	376
	Trowbridge, William F., et al. (See Watkins, Henry J., assignor.)					
202, 303	Trowbridge, William F., assignor of two-thirds interest to Wilbur F. Brigham and Henry J. Watkins, Hudson, Mass. Sewing-machine presser-foot.....	Apr. 9, 1878	470	137	13	669
205, 445	Trowbridge, William O., Newton, Mass., assignor to the Mason & Hamlin Organ Company. Reed-organ.....	June 25, 1878	1095	324	13	1168
198, 803	Trowbridge, William P., assignor, by mesne assignments, to Automatic Boiler and Engine Company, New Haven, Conn. Water-tube steam-generator.....	Jan. 1, 1878	141	40, 41	13	20
208, 806	Trudeau, Louis, Lincoln, R. I. Rein-holder.....	Oct. 8, 1878	445	129	14	555
207, 916	Trudell, Joseph W., and Louis S., Sioux City, Iowa. Front-gear coupling for wagons.....	Sept. 10, 1878	358	109	14	397
	Trudell, Louis S. (See Trudell Joseph W. and Louis S.)					
200, 632	True, David, Salisbury, Mass. Boat-knee.....	Feb. 26, 1878	775	228	13	376
200, 007	True, John G., Chatsworth, Ill. Mouth-piece for musical instruments.....	Feb. 5, 1878	111	37	13	251
200, 008	True, Moses E., Batavia, N. Y. Crosscut-saw handle.....	Aug. 13, 1878	278	84	14	244
	True, Ransome B. (See Gilbert, Newell H. and Arthur G., assignors.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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203, 025	Truesdale, Charles, assignor of one-half interest to William Resor & Co., Cincinnati, Ohio. Cook-stove	July 9, 1878	514	146	14	77
203, 155	Truesdell, Lewis W., assignor to D. F. Steele and A. D. Hoogland, Owego, N. Y. Milk-cooler	June 18, 1878	781	231	13	1123
208, 440	Truland, William L., assignor to self and Edward Tracy, Lausburg, N. Y. Pipe-wrench with cutter	Sept. 24, 1878	936	275	14	480
209, 366	Trull, George. (See Baird, Samuel J., assignor.)					
209, 366	Trumbo, Elias, Rutland, Ill. Cultivator	Oct. 29, 1878	1013	204	14	644
204, 006	Trumbull, Harvey, Central College, Ohio. Clothes-pounder	Feb. 5, 1878	111	87	13	251
204, 461	Trump, Fuller, assignor to J. W. Bookwalter, Springfield, Ohio. Combined cast and wrought iron boiler	June 4, 1878	44	14	13	1019
199, 239	Tschop, Albert. (See Hildrup & Tschop.)					
205, 700	Tschop, Albert, Harrisburg, Pa. Horse hay-rake	Jan. 15, 1878	538	150	13	100
205, 700	Tschudy, Henry M. (See Todd & Tschudy.)					
198, 758	Tubbs, Nelson J., and John Wagner, Saint Joseph, Mo. Combined suction and force pump	July 2, 1878	254	76	14	41
203, 508	Tubular Rivet Company. (See Bray, Mellen, assignor.) (Reissue.)					
205, 926	Tuchfarber, Frank, Cincinnati, Ohio. Producing imitation-pearl surfaces	Jan. 1, 1878	35		13	13
205, 926	Same. Producing metallic pictures	May 14, 1878	371		13	870
205, 926	Tuck, J. Warren, assignor to Union Manufacturing Company, New Britain, Conn. Pump	July 9, 1878	515	146	14	78
202, 304	Tucker, Albert R., et al. (See Smith, William, assignor.)					
205, 015	Tucker, Argyle W., Waxahatchie, assignor to Alford & Sorley, Dallas, Tex. Sulky-plow	Apr. 9, 1878	471	138	13	609
205, 015	Tucker, C. M., et al. (See Phillips, William C., assignor.)					
205, 015	Tucker, Ephraim, assignor to Edward W. Vaill, Worcester, Mass. Folding rocking-chair	June 18, 1878	636	187	13	1103
205, 015	Tucker, Ephraim, assignor to Edward W. Vaill, Worcester, Mass. Folding chair	June 18, 1878	637	187	13	1103
8, 426	Tucker, George W., assignor to American Ring Company, Waterbury, Conn. Umbrella-handle	Sept. 24, 1878	955	280	14	482
8, 426	Same. Umbrella-handle	Sept. 24, 1878	956	280	14	482
203, 675	Tucker, George W., Waterbury, Conn. Manufacture of sleigh-bells	May 14, 1878	474	134	13	832
8, 371	Tucker, Hiram, assignor, by mesne assignments, to Bradley & Hubbard Manufacturing Company and Meriden Malleable Iron Company, Meriden, Conn. Extension-chandelier	Aug. 13, 1878	462	140	14	267
208, 867	Tucker, Hiram, Newton, assignor to Bartholomew W. Worley, Boston, Mass. Spring bed-bottom	Oct. 8, 1878	446	129	14	556
199, 758	Tucker, Morris W., Sumner, Mich. Gate	Jan. 29, 1878	1093	321	13	203
211, 068	Tucker, Stephen D., New York, N. Y. Printer's galley	Dec. 17, 1878	784	217	14	940
202, 305	Tucker, Sylvester J., assignor to self, Robert E. Blankenship, and John R. Macmurdo, Richmond, Va. Revenue-register	Apr. 9, 1878	472	138	13	670
210, 276	Tucker, Washington Hazen, Stone Fort, Ill. Hog-trough	Nov. 26, 1878	855	243	14	803
206, 648	Tucker, William, East Brookfield, assignor of one-half interest to John G. Avery, Spencer, Mass. Crows-head and other slides	July 30, 1878	1349	388	14	194
206, 649	Same. Anti-friction journal-box	July 30, 1878	1351	389	14	194
203, 651	Tucker, William, East Brookfield, Mass. Manufacture of augers	Oct. 1, 1878	201	57	14	516
108, 868	Same. Cylindrical steam-boiler	Oct. 8, 1878	447	129	14	556
200, 231	Tucker, William B., Columbus, Ohio. Wheel-hub	Feb. 12, 1878	245	103	13	205
208, 050	Tucker, William H., et al. (See Greene, John N., assignor.)					
204, 775	Tucker, William H., assignor of one-half interest to Robert S. Dorsey, Indianapolis, Ind. Stove-truck	Oct. 1, 1878	200	57	14	515
208, 869	Tucker, William L., Syracuse, N. Y. Hernial truss	June 11, 1878	368	110	13	1006
207, 031	Same. Truss	Oct. 8, 1878	448	140	14	556
8, 514	Tucker, William W., Hartford, Conn. Cork-extractor	Sept. 3, 1878	47	15	14	355
203, 707	Tudor, Robert M., Philadelphia, Pa. Ornamented window-glass	Dec. 3, 1878	258	81	14	854
209, 308	Tufta, David, Pittsburg, Pa. Breech-loading ordnance	May 14, 1878	602	168	13	908
202, 969	Tufta, Eugene, Malden, Mass. Lantern	Oct. 22, 1878	937	273	14	620
207, 142	Tufta, James W. (See Blackmer, James L., assignor.)					
203, 219	Tufta, James W., Medford, Mass. Manufacture of articles produced by electro-deposition	Apr. 30, 1878	1220	352 } 353	13	781
207, 142	Tufta, Thomas B., Le Roy, N. Y. Cooking stove	Aug. 20, 1878	516	156	14	278
203, 219	Tuggey, William, West Rutland, Vt. Stone-sawing machine	Apr. 30, 1878	1409	430	13	814
207, 685	Tunbridge, John, Newark, N. J. Separating metals from waste solutions	Sept. 3, 1878	109	33	14	363
202, 076	Tunk, Knut G., Brooklyn, N. Y. Lamp-extinguisher	Apr. 2, 1878	214	63	13	629
202, 077	Same. same	Apr. 2, 1878	216	63	13	629
207, 694	Tunny, Patrick F., Greenbush, N. Y. Clasp	Sept. 3, 1878	109	33	14	363
210, 477	Turk, James W. B., Euche, Tenn. Medical compound	Dec. 3, 1878	90		14	836
202, 895	Turl, John. (See Deoley & Turl.)					
205, 017	Turley, Marshall, assignor of one-third interest to John A. Churchhill, Council Bluffs, Iowa. Horse-collar	Apr. 23, 1878	1134	326	13	706
209, 093	Turnan, Isaac, Smithland, Iowa. Grain-separator	June 18, 1878	638	188	13	1104
209, 093	Turnbull, Mungo, and James Forster, Toronto, Ontario, Canada. Terrestrial globe	Nov. 19, 1878	506	153 } 154	14	756
201, 210	Turnbull, Thomas T. (See Browne, George, assignor.)					
199, 332	Turneure, Ella. (See Turneure, Robert, assignor.)					
202, 894	Turneure, Robert, assignor, by mesne assignments, to Ella Turneure, Rochester, N. Y. Shoe-tree	Mar. 12, 1878	390	120	13	481
202, 894	Turner, Calvin H. and Marcus C., Batavia, N. Y. Refrigerator shipping-box	Jan. 15, 1878	636	185	13	115
202, 894	Turner, Demetrius, Grand Rapids, Mich. Steam-engine	Apr. 23, 1878	1132	325 } 326	13	766
206, 153	Turner, George. (See Sterling, Charles A., assignor.) (Reissue.)					
209, 994	Turner, George W., Tupelo, Miss. Explosive shell	July 16, 1878	770	221	14	114
205, 701	Turner, George Wesley, Saint Paul, Minn. Locomotive smoke-stack	Nov. 19, 1878	509	154	14	756
210, 580	Turner, Hardaway A., Bedford County, Va. Fly-fan motor	July 2, 1878	255	76	14	41
202, 487	Same. Churn-motor	Dec. 3, 1878	211	55	14	851
8, 281	Turner, Henry O., Cazenovia, N. Y. Hay-knife	Apr. 16, 1878	668	196	13	702
203, 798	Turner, James Lawrence, New York, N. Y. Waste-pipe trap	June 11, 1878	490	142	13	1020
210, 727	Turner, John F., Philadelphia, Pa. Weeding implement	May 14, 1878	604	169	13	908
107, 224	Turner, John Michael, Bethania, N. C. Pea and bean huller	Dec. 10, 1878	374	102	14	880
206, 984	Turner, John W., Baltimore, Md. Clothes-line holder	Aug. 20, 1878	602	181	14	289
199, 739	Turner, John William, Fort Worth, Tex. Twine holder	Aug. 13, 1878	346	100	14	253
200, 232	Turner, Joseph S., Rockland, Mass. Throat-plate for boot and shoe sewing machine	Jan. 29, 1878	1094	321	13	203
205, 156	Same. Channeling-tool for boot and shoe soles	Feb. 12, 1878	346	103	13	205
205, 156	Turner, Josiah S., assignor of one-half interest to Henry R. Groneweg, Dayton, Ohio. Book-support	June 18, 1878	782	231	13	1123

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
210, 648	Turner, Lafayette, Cedar Rapids P. O., Iowa. Fence-post .....	Dec. 10, 1878	293	80	14	870
208, 938	Turner, Lewis W., Yalesville, Conn. Stove-pipe shelf .....	Oct. 15, 1878	532	166	14	571
	Turner, Marcus C. (See Turner, Calvin H. and Marcus C.) .....					
205, 220	Turner, Nathan F., Brooklyn, assignor of one-half interest to George H. Mellen, New York, N. Y. Ball-target .....	June 25, 1878	862	255	13	1128
	Turner, Oliver W. (See Bee, Asa, assignor.) .....					
	Turner, Robert. (See Eberhard & Turner.) .....					
205, 320	Turner, Wendell E., New York, N. Y. Device for unwinding thread from spools or bobbins .....	June 25, 1878	967	286	13	1152
203, 960	Turner, William S., Phillips County, Ark. Cotton-planter .....	May 21, 1878	786	225	13	939
210, 581	Turner, Winfield A., Hiawatha, Kans. Seed-drill .....	Dec. 3, 1878	212	56	14	851
206, 650	Turquand, William Michael Glynn, Pimlico, England. Device for shearing animals .....	July 30, 1878	1352	389	14	195
206, 370	Turton, William, Brooklyn, N. Y. Water-closet .....	July 23, 1878	1041	299	14	152
	Tuston, W. E., et al. (See Evans, Louis, assignor.) .....					
	Tuthill, Joshua, et al. (See Barber, Oliver P., assignor.) .....					
	Tuttle & Bailey Manufacturing Company. (See Tuttle, Edward A., assignor.) .....					
209, 434	Tuttle, Calvin Rutter, New Brighton, Pa. Balance and load weight .....	Oct. 20, 1878	1080	314	14	655
208, 349	Tuttle, Edward A., New York, N. Y., assignor to Tuttle & Bailey Manufacturing Company. Car-ventilator .....	Sept. 24, 1878	842	245	14	468
208, 350	Same. Air-register .....	Sept. 24, 1878	843	246	14	468
	Tuttle, Joseph A. (See Rogers & Tuttle.) .....					
210, 065	Tweed, Henry A., Brooklyn, N. Y. Stove-door knob .....	Nov. 10, 1878	584	175	14	706
200, 489	Tweed, Peter Johnson, Blair, Nebr. Picket-pin .....	Feb. 10, 1878	616	182	13	344
202, 488	Twiss, Edward Nichols, Marblehead, Mass. Anchor for boats, &c. ....	Apr. 16, 1878	609	196	13	702
	Twitchell, Charles S. (See Golightly & Twitchell) .....					
201, 303	Twitchell, Franklin, and Charles A. Richardson, Nashua, N. H. Clearer-roll frame for drawing and spinning machine .....	Mar. 12, 1878	494	152	13	495
	Tyer, George W. (See Madison, Pulaski T., assignor.) .....					
202, 608	Tygh, James F., assignor to self and Patrick McCrossin, Philadelphia, Pa. Machine for cutting tobacco .....	Apr. 16, 1878	810	234	13	717
210, 823	Tyler, George L., assignor of two-thirds interest to T. W. Tyler and C. O. Beede, Lynn, Mass. Machine for splitting and beveling leather .....	Dec. 10, 1878	473	133	14	894
201, 897	Tyler, John B., Brooklyn, assignor of one-half interest to Thomas Davies, Jr., Green Point, N. Y. Secsaw .....	Apr. 2, 1878	39	10	13	604
203, 510	Tyler, Merrill A., New Durham, N. H. Machine for trimming boot and shoe heels .....	May 7, 1878	285	82	13	860
8, 490	Tyler, Philos B., William M. Chandler, and L. F. Standish, assignors to George Selden, Erie, Pa. Pocket lighting device .....	Nov. 12, 1878	460	139	14	746
204, 925	Tyler, Thomas W., and William C. Baskin, Hammond, Ill. Corn-planter .....	June 18, 1878	552	161	13	1092
	Tyler, T. W., et al. (See Tyler, George L., assignor.) .....					
	Type Writer Company. (See Barron, Ernest R., assignor.) .....					
	Same. (See Barron, Walter J., assignor.) .....					
	Same. (See Clough & Jenne, assignors.) .....					
	Same. (See Sholes, C. Latham, assignor.) .....					
	Same. (See Sholes & Glidden, assignors.) .....					
199, 760	Tyrer, Peter, Melbourne, Colony of Victoria. Cork-extractor .....	Jan. 20, 1878	1095	321	13	203
	Tysdal, John, et al. (See Tysdal, Knud, assignor.) .....					
208, 001	Tysdal, Knud, assignor of four-fifths interest to Theodore O. Berg, and Lewis, John, and Osmand Tysdal, Lee, Ill. Barbed fence-wire .....	Sept. 10, 1878	448	135	14	409
	Tysdal, Lewis, et al. (See Tysdal, Knud, assignor.) .....					
	Tysdal, Osmand, et al. (See Tysdal, Knud, assignor.) .....					
208, 773	Tyson, Bryan, Washington, D. C. Washer and amalgamator for hydraulic mining .....	Oct. 8, 1878	340	98	14	541
8, 062	Tyson, Charles, Philadelphia, Pa. Water-tube boiler .....	Jan. 20, 1878	1224	359	13	223
209, 091	Tyson, Charles, assignor of one-half interest to Rex & Bockins, Philadelphia, Pa. Boot-jack .....	Oct. 15, 1878	703	203	14	593
207, 461	Tyson, Harvey R., Minneapolis, Minn. Machine for trussing barrels .....	Aug. 27, 1878	861	254	14	326
209, 092	Tyson, Robert, Baltimore, Md. Bran-scurer .....	Oct. 16, 1878	703	204	14	594
199, 004	Udell, Calvin G., Indianapolis, Ind. Step-ladder .....	Jan. 8, 1878	295	86	13	61
201, 568	Uford, Alfred H., Rockford, Ill. Land-roller .....	Mar. 19, 1878	578	178	13	514
201, 134	Ulrich, Elias, Uhricksville, Ohio. Siphon .....	Mar. 12, 1878	320	98	13	470
	Ulrich, Adam. (See Pfuifer & Ulrich.) .....					
209, 729	Ulrich, Anton, Lockport, N. Y. Refrigerator-wagon .....	Nov. 5, 1878	208	62	14	768
200, 952	Ulrich, William, Madison, N. J. Running-gear for wagons .....	Mar. 5, 1878	128	42	13	435
	Underhill, A. M. (See Kelp, Francis H., assignor.) .....					
204, 513	Underhill, Hazen R., Derry, N. H. Plow .....	June 4, 1878	85	29	13	1025
202, 489	Underhill, Stephen W., Croton Point, N. Y. Brick-kiln .....	Apr. 16, 1878	670	196	13	702
207, 371	Underhill, William R., Van Wert, Ohio. Street-lamp .....	Aug. 27, 1878	763	228	14	315
207, 372	Same. Lamp-burner .....	Aug. 27, 1878	764	228	14	315
199, 671	Underwood, Amos H., Dundee, assignor of one-half interest to N. H. Sherburne, Chicago, Ill. Cooking attachment to coal-oil stoves .....	Jan. 29, 1878	1016	296	13	190
205, 927	Underwood, Flavins J., North Springfield, assignor of two-thirds interest to Andrew Warren and Perrin G. March, Saint Louis, Mo. Railway-track drill .....	July 9, 1878	516	146	14	78
	Underwood, Henry M. (See Muntzenberger & Underwood.) .....					
206, 754	Underwood, Henry M., assignor to self, Urian J. Lewis, Courtland A. Dewey, and George Hale, Kenosha, Wis. Barbed fence .....	Aug. 6, 1878	97	31	14	219
200, 490	Underhill, Henry P., Baltimore, Md. Fertilizer-distributor .....	Feb. 19, 1878	617	182	13	344
202, 307	Underwood, John R., Hillard, Iowa. Washing-machine .....	Apr. 9, 1878	474	138	13	672
204, 635	Underwood, Joseph B., Fayetteville, N. C., assignor to Annie V. Jessup. Coffee-roaster .....	June 4, 1878	211	67, 68	13	1042
209, 842	Underwood, Joseph B., Fayetteville, N. C. Combined chair and treadle-power .....	Nov. 12, 1878	338	101	14	730
209, 202	Underwood, William T., Louisville, Ky. Portable fire-engine .....	Oct. 22, 1878	839	242	14	617
207, 373	Unger, Abraham, New York, N. Y. Ventilator .....	Aug. 27, 1878	765	228	14	315
204, 267	Unger, Hiram, Germantown, assignor to self and Jacob S. Antrim, Montgomery County, Ohio. Gate-latch .....	May 28, 1878	1130	323	13	966
205, 773	Unger, William L., Baltimore, Md. Coin-wrapper .....	July 9, 1878	349	100	14	56
	Union Hardware Company. (See Weston, Ephraim F., assignor.) .....					
	Union Manufacturing Company. (See Tuck, J. Warren, assignor.) .....					
	Union Nut Company. (See Hine, Merritt, assignor.) .....					
	Union Paper Bag Machine Company. (See Morgan, Charles H., assignor.) .....					
	United States Dairy Company. (See Mège, Hippolyte, assignor.) .....					
	United States Iron Company. (See McKinney, William S., assignor.) .....					
	United States Liquor Registering Company. (See Goebel, Christian H., assignor.) .....					
	United States Patent Company. (See Nebinger, George R., assignor.) .....					
	United States Steam Feed Company. (See Ross & McLeod, assignors.) .....					
	Unverferth, Frank W. (See Dixon & Unverferth.) .....					
205, 446	Uwinn, John, Sheffield, Great Britain. Etching on glass .....	June 25, 1878	1096		13	1168
204, 636	Uzicker, Otto, assignor to Adolph Shoening, Chicago, Ill. Velocipede .....	June 4, 1878	212	68	13	1042

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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205, 447	Updegraff, Horace, Smithfield, Ohio. Breech-loading fire-arm	June 25, 1878	1097	324	13	1108
205, 702	Upham, Andrew J., assignor of one-third interest to John H. Lawrence, Sterling, Ill. Barbed-wire fence	July 2, 1878	256	76	14	41
198, 759	Upjohn, Henry U., Kalamazoo, Mich. Device for compressing rubbers in thill-couplings	Jan. 1, 1878	36	9	13	13
207, 225	Upstone, John, San Francisco, Cal. Metallic wheelbarrow	Aug. 20, 1878	603	181	14	289
200, 585	Upton, James S., Battle Creek, Mich. Grain-separator	Feb. 19, 1878	712	209 210	13	358
202, 600	Upton, William, assignor of one-half interest to Charles R., John W., and William S. Kohl, Philadelphia, Pa. Spike-extractor	Apr. 16, 1878	811	234	13	717
209, 367	Upton, William H., Camden, N. J., assignor of one-half interest to George M. Davis. Velocipede-sled	Oct. 29, 1878	1014	295	14	645
	Uren, Richard. (See Rawlings, Joseph W. V., assignor.)					
	Urey, Henry F. (See Treach & Urey.)					
210, 728	Urie, James, sr., Evansville, Ind. Plow	Dec. 10, 1878	375	102	14	880
198, 919	Urie, William T., Warrensburg, Mo. Spark-arrester	Jan. 1, 1878	203	57	13	39
202, 203	Urbahart, John M., Jefferson, Tex. Percussion-shell	Apr. 9, 1878	368	108	13	655
	Useful Machinery Company. (See Post, John W., assignor.)					
204, 462	Utterback, A. W., Napahannock County, Va. Mechanical movement	June 4, 1878	45	15	13	1019
	Vacuum Oil Company. (See Everest & Ross, assignors) (Reissue.)					
207, 632	Vail, Frank E., Chelsea, Mass. Gas-regulator	Sept. 10, 1878	264	82	14	386
	Vail, James B. (See Vail, John E. and James B.)					
205, 983	Vail, John E. and James B., assignors of one-half interest to George S. Gifford and Jonathan W. Binns, Adrian, Mich. Machine for operating churns	July 16, 1878	589	169	14	92
206, 371	Vaile, Charles H., assignor to Joseph M. Rice, Worcester, Mass. Mop-wringer	July 23, 1878	1042	200	14	152
203, 511	Vaile, John H., Dayton, Ohio. Pumping-engine	May 7, 1878	287	82	13	800
	Vaill, Edward W. (See Russell, Edwin F., assignor) (Reissue.)					
	Same. (See Tucker, Ephraim, assignor.)					
	Same. (See Wakefield, John E., assignor) (Reissue.)					
	Same.					
207, 696	Vaillant, Charles Raul, Mobile, Ala. Steam-gage	Sept. 3, 1878	111	33	14	363
8, 073	Valentine, Alfred A., New York, and Henry A. Morrison, Brooklyn, N. Y. Umbrella-rib tip	Feb. 5, 1878	234	72	13	269
202, 896	Valentina, Gordon B., Annville, Pa. Chain-pump	Apr. 23, 1878	1135	326	13	766
207, 402	Valley, John Napoleon, Jersey City, N. J. Spring bed-bottom	Aug. 27, 1878	862	254	14	320
	Valpey, Charles R., et al. (See Merriam, George D., assignor.)					
203, 301	Van Allen, Noah, Chicago, Ill. Combined shoulder-brace and suspenders	May 7, 1878	72	21	13	830
208, 351	Van Alta, Henry, Milwaukee, Wis. Chromatrope buzz-toy	Sept. 24, 1878	844	240	14	468
208, 500	Van Alta, Henry, assignor of one-half interest to James B. Erwin, Milwaukee, Wis. Fishing-rod	Oct. 1, 1878	46	15	14	495
206, 280	Van Arnam, Charles H., Lansingburg, N. Y. Nut-lock	July 23, 1878	932	264	14	130
	Van Baar, Rudolph. (See Daul, Anthony, assignor.)					
210, 885	Van Benschoten, Edward W., New York, N. Y. Paper-fastener	Dec. 17, 1878	558	156	14	913
201, 070	Van Benschoten, Henry E., Hillsdale, N. Y. Metallic protector for the soles and heels of boots and shoes	Mar. 5, 1878	248	78	13	452
210, 824	Same. Boot	Dec. 10, 1878	474	133	14	894
201, 573	Van Benthuyssen, Isaac E., Branford, Conn., assignor to Thomas Kennedy, New York, N. Y. Reversible latch	Mar. 19, 1878	788	240	13	543
202, 897	Van Bibber, Andrew, Cincinnati, Ohio. Inking-roller composition for printers	Apr. 23, 1878	1136	326	13	766
204, 515	Same. Barrel-lining composition	June 4, 1878	67	30	13	1025
207, 570	Same. Burial-safe	Aug. 27, 1878	979	288	14	341
201, 304	Van Brunt, Willard A., and Spencer E. Davis, Horicon, Wis. Cultivator-tooth	Mar. 12, 1878	495	153	13	495
208, 652	Same. Force-feed seedling machine	Oct. 1, 1878	202	57, 58	14	516
209, 633	Same. Cultivator	Nov. 5, 1878	107	31, 32	14	695
204, 514	Van Buren, George W., Jr., assignor of one-half interest to George W. Hinkle, Mendon, Mich. Feed-steamer	June 4, 1878	86	29	13	1025
205, 321	Van Buren, Jafew S., West Troy, N. Y. Stove-damper	June 25, 1878	968	280 287	13	1152
	Van Buren, Richard. (See Bissell & Van Buren.)					
202, 970	Van Buskirk, William G., Fishkill Landing, and Gordon Hay, New York, N. Y. Permutation-lock	Apr. 30, 1878	1221	353	13	782
208, 129	Vandawater, Elias, Manteno, Ill. Harrow	Sept. 17, 1878	594	176	14	433
202, 490	Vaudenburg, Limbrick W., assignor to self and William H. Dimmick, Honesdale, Pa. Harness-pad	Apr. 16, 1878	671	197	13	702
207, 463	Van Depoele, Charles Joseph, Detroit, Mich. Oscillating steam-valve	Aug. 27, 1878	863	255	14	326
	Vanderbeek, Garry. (See Willis, Henry M., assignor.)					
207, 632	Vanderman, William, Hartford, Conn. Trap for basins	Sept. 3, 1878	47	15	14	355
202, 491	Van Derzee, Philip L., New Baltimore, N. Y., assignor to Washburn & Moen Manufacturing Company, Worcester, Mass. Machine for forming bale-tie hooks	Apr. 16, 1878	672	197	13	702
201, 574	Van Doren, Lansing, Washington, D. C. (William T. Van Doren, Jr., administrator). Rotary engine	Mar. 19, 1878	789	240	13	543
	Van Doren, William T., Jr., administrator. (See Van Doren, Lansing.)					
208, 689	Van Dorn, James H., Cleveland, Ohio. Iron fence	Oct. 8, 1878	261	74, 75	14	531
210, 825	Same. same	Dec. 10, 1878	475	134	14	894
210, 826	Same. same	Dec. 10, 1878	475	134	14	894
199, 598	Vandorster, Alvin W., Salem, Oreg. High and low water indicator for steam-boilers	Jan. 22, 1878	915	268	13	107
201, 305	Vandorster, Alvin W., assignor of one-half interest to John W. Crawford, Salem, Oreg. Sheet-metal-flanging machine	Mar. 12, 1878	496	153	13	495
199, 334	Van Ehren, Fritz A. L., New Orleans, La. Aerial vessel	Jan. 15, 1878	637	186	13	115
203, 220	Van Gelder, John, New York, N. Y. Hat and cap	Apr. 30, 1878	1460	430	13	814
204, 637	Van Gunster, John, assignor of one-half interest to Charles W. Norton, Ilion, N. Y. Thermometer attachments for sad-irons	June 4, 1878	213	68	13	1042
8, 192	Van Haagen, Anthony, assignor to Henry C. Butcher, Philadelphia, Pa. Filtering apparatus	Apr. 23, 1878	1157	332	13	769
200, 363	Van Haagen, Anthony, Philadelphia, Pa. Filtering apparatus	Feb. 12, 1878	487	143	13	316
8, 412	Van Hoesen, Eugene M., and Nelson H. Brown, Syracuse, N. Y. Car-coupling. (Reissue.)	Sept. 10, 1878	465	140	14	412
203, 390	Van Hoevenbergh, Henry, Elizabeth, N. J., and William K. Applebaugh, Brooklyn, N. Y. Support for stencil-pen	May 7, 1878	163	47	13	843
204, 516	Van Hoevenbergh, Henry, Elizabeth, N. J. Printing-telegraph	June 4, 1878	88	30	13	1025
203, 676	Van Horn, Joseph S., assignor to William H. Woglom, New York, N. Y. Sleeve-protector	May 14, 1878	474	134	13	892
	Van Horn, Laura. (See Steel, Arthur R., assignor.)					
200, 364	Van Horne, William J., Schenectady, N. Y. Measure for hats and caps	Feb. 12, 1878	488	143	13	316

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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201, 575	Van Horne, William J., Schenectady, N. Y. Sweat-leather for hats and caps.	Mar. 10, 1878	701	240	13	543
208, 002	Van Houten, Charles, Marion, Ohio. Grain-binder	Sept. 10, 1878	449	135	14	409
202, 306	Van Houten, William, Pella, Iowa. Coal and potato screen	Apr. 9, 1878	473	138		670
203, 569	Van Kannel, Theophilus, assignor to Arch V. Stewart, Cincinnati, Ohio. Curtain-cord tightener	May 14, 1878	371	105		879
201, 306	Van Lew, John N. (See Tonkin, John J., assignor.)	Mar. 12, 1878	497	153	13	495
201, 963	Same. Grain-car door	Apr. 2, 1878	99	29	13	613
202, 768	Van Meredith, M. (See Hunter, William R., assignor.)	Apr. 23, 1878	906	268	13	749
199, 943	Vannan, Forbes H., Wilkesbarre, Pa. Expanding mandrel	Feb. 5, 1878	65	18	13	241
200, 882	Van Ness, Thomas C., et al. (See Mansfield, William H., assignor.)	Mar. 5, 1878	97	24	13	425
200, 110	Van Noorden, Ezekiel, Boston, Mass. Shears	Feb. 5, 1878	221	68	13	267
208, 653	Vannorman, Aaron, Sand Hill P. O., Knox County, Mo. Seed-dropper	Oct. 1, 1878	204	59	14	516
200, 365	Van Nuhuy, Isaac, and Thomas P. King, Brooklyn, N. Y. Machine for trimming the heels of boots and shoes	Feb. 12, 1878	489		13	316
201, 307	Van Nuy, Thomas C., Bloomington, Ind. Means for preventing fraud in stamps, checks, bonds, &c.	Mar. 12, 1878	490	154	13	495
211, 060	Van Orden, John M., New York, N. Y. Corset-clasp	Dec. 17, 1878	785	216	14	940
209, 435	Van Orden, Cyprian. (See Keene & Van Order.)	Oct. 20, 1878	1081	314	14	655
207, 571	Van Orden, Peter, Cortland Village, N. Y. Stone-gatherer	Aug. 27, 1878	980	268	14	341
207, 572	Van Orman, Clayton, and Marie and James M. Hagenbaugh, assignors to selves and Thomas H. Cave, Athens, Mich. Grain-separator	Aug. 27, 1878	985	289	14	342
207, 573	Same. Hatchway	Aug. 27, 1878	988	289	14	342
199, 241	Same. (See Clapp & Van Patten.)	Jan. 15, 1878	541	160	13	100
203, 964	Van Patten, Frederick. (See Wells, Richardson, Van Patten & Wells.)	May 21, 1878	789	226	13	940
207, 833	Van Pelt, George H. (See Beach, Flavel A., assignor.)	Sept. 10, 1878	265	82	14	396
203, 961	Van Pelt, John Henry, New York, N. Y. Temporary binder	May 21, 1878	787	225	13	939
205, 448	Van Praag, Leon, assignor to Wood & Hughes, New York, N. Y. Bracelet-fastening	June 23, 1878	1006	325	13	1109
207, 833	Van Rees, Nicholas. (See Ripka & Van Rees.)	Jan. 15, 1878	637	185	13	115
203, 961	Van Sanda, Fred. (See Spencer, William D., assignor.)	Aug. 6, 1878	101	61	14	230
205, 448	Van Sickle, Michael, Brooklyn, N. Y. Spring for bed-bottoms	Aug. 20, 1878	603	181	14	230
207, 833	Van Siclen, Ferdinand, New York, N. Y. Sectional trunk	Jan. 15, 1878	637	185	13	115
205, 448	Van Skelline, Isabella J., Brooklyn, N. Y. Wrapper for bonbons	Aug. 6, 1878	101	61	14	230
207, 833	Van Skelline, Theodore. (See Bates, Emory H., assignor.)	June 23, 1878	1006	325	13	1109
207, 833	Van Slyck, Nicholas. (See Bradt, Henry, assignor.)	Jan. 15, 1878	637	185	13	115
199, 333	Same. (See Bradt & Van Slyck.)	Aug. 6, 1878	101	61	14	230
207, 226	Van Stavoren, Samuel J., Philadelphia, Pa. Cuspadore	Aug. 20, 1878	603	181	14	230
203, 512	Same. (See Bradt & Van Slyck.)	Jan. 15, 1878	637	185	13	115
205, 157	Van Tassel, Philip, and Martin Paup, Port Madison, Wash. Steam-pump	Aug. 6, 1878	101	61	14	230
206, 985	Van Tyne, Henry C., et al. (See Lippincott, Joseph M., assignor.)	May 7, 1878	288	82	13	890
207, 227	Van Tyne, Willis. (See Bell, George C., assignor.)	June 18, 1878	782	231	13	1123
202, 492	Van Vele, Nicholas, assignor of three-fourths interest to Ursula Vele, Elmira, N. Y. Car-starter	Aug. 13, 1878	346	106	14	233
207, 087	Vanvleet, Willard Bently, Vincennes, Iowa. Stock-car	Aug. 20, 1878	604	182	14	239
206, 372	Van Voorhis, James D. (See Chandler, Wickstead & Van Voorhis.)	Apr. 16, 1878	673	197	13	702
199, 701	Van Wagenen, Albert, assignor to Hatch Flexible Sewed Shoe Company, Boston, Mass. Boot and shoe	Aug. 13, 1878	346	106	14	233
204, 864	Same. (See Clarke & Van Wagenen.)	Aug. 20, 1878	604	182	14	239
208, 441	Van Wagenen, Charles. (See Clarke & Van Wagenen.)	Apr. 16, 1878	673	197	13	702
201, 469	Van Wagoner, Thomas, Newark, N. J. Sash-cord guide	Aug. 13, 1878	443	137	14	264
210, 375	Van Wie, Avery, Indianapolis, Ind. Axle-nut wrench	July 23, 1878	1043	299	14	152
200, 813	Van Winkle, A. (See Baxter, William, assignor.)	Jan. 29, 1878	1095	322	13	203
204, 864	Van Wormer, Jasper, Albany, N. Y. Heating-stove	Feb. 26, 1878	901	283	13	404
208, 441	Van Wormer, Matthew, Dayton, Ohio. Dumping-car	June 11, 1878	462	135	13	1077
201, 469	Same. (See Glidden & Vaughan.)	Sept. 24, 1878	937		14	480
210, 375	Varicas, Lionel, San Francisco, Cal. Broom-sewing machine	Mar. 10, 1878	768	207	13	528
200, 491	Varns, Harvey B., Washington, assignor of six-sevenths interest to Edward P. James H., and Rosia W. Welsh, Charles Reed, James P. Willett, and Edmund P. Hann, Georgetown, D. C. Process of cleansing millstones	Nov. 20, 1878	938	273	14	817
199, 762	Vase, William W. (See Künster, Jakob, assignor.)	Feb. 19, 1878	619	182	13	344
207, 917	Vauchain, John A. P. La Fayette, Ind., assignor of one-half interest to Harry Harrison, Nashville, Tenn. Car-axle box	Jan. 29, 1878	1099	322	13	203
200, 813	Vaughan, Henry W., assignor of one-half interest to John W. Hoard, Providence, R. I. Lamp-burner	Feb. 26, 1878	901	283		404
204, 864	Vaughan, Phineas W. (See Glidden & Vaughan.)	June 11, 1878	462	135	13	1077
208, 441	Vaughn, George Sylvester, Franklin, Pa. Torpedo for oil-wells	Sept. 10, 1878	359	109	14	397
209, 770	Vaux, Ethan Farmer, assignor of one-half interest to William Powell, Washington, D. C. Steam street-car	Nov. 5, 1878	209	62	14	709
204, 864	Veale, Mary K. (See Veale, Thomas C., assignor.)	June 11, 1878	280	87	13	1035
209, 526	Veale, Thomas C., New York, N. Y., assignor to Mary K. Veale, Jersey City, N. J. Combination-barrel	Oct. 20, 1878	1177	342	14	668
207, 918	Vellines, Benton H., Norfolk, Va. Peanut-cleaner	Sept. 10, 1878	359	109	14	398
204, 864	Venable, James K. P., Shelby County, Ky. Bee-hive	Oct. 29, 1878	1178	342		668
209, 526	Venable, Samuel W., Petersburg, Va. Machine for making plug-tobacco	Sept. 24, 1878	959	281	14	483
207, 918	Vereckler, Joseph J. (See Horral & Vereckler.)	Feb. 5, 1878	56	18	13	242
209, 527	Verea, Ramon, New York, N. Y. Calculating-machine	July 2, 1878	256	77	14	41
209, 527	Verharen, Frank T., Vinton, Iowa. Corn-cultivator	July 2, 1878	130	39	14	26
8, 429	Vermilya, James H., et al. (See Hunter, George W., assignor.)	Apr. 30, 1878	1470	430	13	814
109, 944	Vermilya, Leland D., Dayton, Ohio, William S. Reyburn and Edmond A. W. Hunter, Philadelphia; said Vermilya assignor, by mesne assignments, to said Reyburn, Hunter, and Byron P. Moulton, Philadelphia, Pa. Lighting-rod	June 11, 1878	280	87	13	1035
205, 703	Verniaud, Claudius, assignor to self, Bernard Arntzen, Louis Miller, and John Weber, Quincy, Ill. Cock and faucet	Oct. 29, 1878	1178	342	14	668
205, 589	Vernon, George W. (See Vernon, Robert L. and George W.)	Sept. 10, 1878	359	109	14	397
203, 221	Vernon, Robert L. and George W., Greensborough, N. C. Railway-switch signal	Nov. 5, 1878	209	62	14	709
204, 776	Vernon, William Elias, Oakalooa, Iowa. Coffee or nut roaster	June 11, 1878	280	87	13	1035
203, 221	Veronee, Cornelious B., Athens, Ga. Apple corer and slicer	Oct. 29, 1878	1177	342	14	668
204, 776	Veronee, Cornelius B., assignor of one-half interest to James Bancroft, Athens, Ga. Treadle attachment for sewing-machines	Sept. 24, 1878	959	281	14	483
	Veronee, Edward B. (See Cusack & Veronee.)	Feb. 5, 1878	56	18	13	242



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201, 135	Verpillier, Emile, Newark, N. J. Ornamental-chain.....	Mar. 12, 1878	321	98	13	470
8, 167	Very, Edward W., Annapolis, Md. Signal-cartridge..... (Reissue.)	Apr. 9, 1878	503	146	13	674
	Very, Theodore S. (See Batchelder, Hazen J., assignor.)..... (Reissue.)					
	Very, T. I., et al. (See Batchelder, Hazen J., assignor.).....					
206, 060	Vestal, Tilghman Ross, Fall River, Mass. Measuring-pump.....	July 16, 1878	664	102	14	102
	Veyssie, L. E., et al. (See Roberts, Edward J., assignor.).....					
203, 677	Viall, William G., North Adams, Mass. Shoe.....	May 14, 1878	475	135	13	892
210, 478	Vicaire, Eugène, Paris, France. Device for transmitting motion.....	Dec. 3, 1878	90	23	14	836
8, 314	Victor Sewing Machine Company. (See Pratt, George M., assignor.).....					
	Victory, Charles H., assignor to William F. Rockefeller, Albany, N. Y. Bale-tie..... (Reissue.)	July 2, 1878	276	81	14	43
	Viele, Ursula. (See Van Viele, Nicholas, assignor.).....					
207, 088	Viereck, Carl Heinrich, Schleswig, Prussia. Lantern.....	Aug. 13, 1878	444	137	14	265
205, 817	Vile, Albion, Southampton, England. Compound steam-engine.....	July 9, 1878	399	114	14	63
		July 9, 1878	401	115	14	63
205, 818	Villasana, José R., New York, N. Y. Cigarette-holder.....	July 9, 1878	401	115	14	63
	Vincent Flexible Truck Company. (See Vincent, George, assignor.).....					
201, 308	Vincent, George, Stockton, Cal. Locomotive.....	Mar. 12, 1878	500	154	13	495
201, 309	Same..... Car-truck.....	Mar. 12, 1878	502	154	13	495
201, 310	Vincent, George, Stockton, and Milton A. Wheaton, San Francisco, Cal. Car-truck.....	Mar. 12, 1878	503	155	13	495
201, 311	Vincent, George, assignor of part interest to W. T. Browne and Asa Clark, Stockton, Cal. Car-truck.....	Mar. 12, 1878	504	155	13	496
208, 215	Vincent, George, Stockton, assignor to Vincent Flexible Truck Company, San Francisco, Cal. Car-truck.....	Sept. 17, 1878	686	202	14	445
203, 962	Vincent, John Jacob, and George Bard McMillan, Poy Sippi, Wis. Leaf-turner.....	May 21, 1878	788	226	13	939
	Vint, James K. (See Nisbit & Vint.).....					
	Vinton, Charles E., et al. (See Shoots, James D., assignor.)..... (Reissue.)					
199, 240	Vinton, John H., and Michael E. Fitzpatrick, assignors to Frank Armstrong, Bridgeport, Conn. Garter.....	Jan. 15, 1878	539	159	13	100
208, 870	Vinton, John H., assignor to Frank Armstrong, Bridgeport, Conn. Screw-cutting die and holder.....	Oct. 8, 1878	450	130	14	556
202, 078	Viol, Adolphe, and Cesaire P. Dufiot, Paris, France. Bleaching feathers.....	Apr. 2, 1878	218	.....	13	629
200, 586	Visel, Christian, Cold Water, Mich. Vat.....	Feb. 19, 1878	713	210	13	358
203, 391	Vitt, Adolphus H., Union, Mo. Piston-rod packing.....	May 7, 1878	164	47	13	843
206, 695	Vivarttas, Aloha, assignor to self and Mark R. Hamilton, New York, N. Y. Packing for steam-engines.....	Aug. 6, 1878	40	12	14	211
204, 463	Voegel, August, Brooklyn, N. Y. Screw-cap for bottles, jars, &c.....	June 4, 1878	46	15	13	1019
206, 407	Voegtle, Jacob, Indianapolis, Ind. Laundry-stove.....	July 30, 1878	1098	314	14	164
203, 678	Vogel, August, New York, N. Y. Purse.....	May 14, 1878	475	135	13	892
	Vogel, William. (See Broughton, John, assignor.).....					
200, 587	Vogellus, Peter C., Philadelphia, Pa. Separating tin from tin-scrap.....	Feb. 19, 1878	713	.....	13	359
	Vogt, August. (See Wendes, Vogt & Richter.).....					
	Vogts, William A. (See Williamson & Vogts.).....					
203, 963	Vollbrecht, Louis Paul, Mason, Tex. Camp-stove.....	May 21, 1878	789	226	13	940
205, 515	Von Culin, Matthew, Delaware City, Del. Dog-collar.....	July 2, 1878	54	16	14	16
	Von Platen, Carl G. (See Schilling, Gustav, assignor.).....					
205, 221	Von Buville, Otto, Bruchsal, Baden. Horseshoe.....	June 25, 1878	863	255	13	1138
	Vordtriede, Ernst H. (See Schroeder, Herman, assignor.).....					
	Vosburgh & Co., W. C. (See Brown, James, assignor.).....					
209, 946	Vosburgh, Tunis, Clyde, N. Y. Alarm-register.....	Nov. 12, 1878	445	135	14	744
	Vose, Richard, administrator. (See Bullock, William, deceased)..... (Reissue.)					
199, 945	Vose, Richard, assignor to John Van Deusen Reed, New York, N. Y. Spiral spring.....	Feb. 5, 1878	57	18	13	242
	Vose, Robert, et al. (See Huston, David, assignor.).....					
207, 574	Voss, Joseph Hermann, Cincinnati, Ohio. Horse-detacher.....	Aug. 27, 1878	990	200	14	342
	Voth, Charles W., et al. (See Dressell & Voth, assignors)..... (Reissue.)					
	Same..... same.....					
	Voth, Ernst H. (See Dressell & Voth)..... (Reissue.)					
	Voth, Ernst Heinrich. (See Dressell & Voth.).....					
210, 231	Voth, Henry, George Paul Sackenreuther, and Christopher Hefft, Pekin, Ill. Agricultural boiler.....	Nov. 26, 1878	775	230	14	795
	Voth, John G. (See Dressell & Voth.)..... (Reissue.)					
	Same..... same.....					
	Vowles, Daniel W. (See Smith & Vowles.).....					
203, 799	Vredenburgh, Albert C., Kingston, N. Y. Breach-loading fire-arm.....	May 14, 1878	604	169	13	908
	Vulcanito Manufacturing Company. (See Lewis, Warren J., assignor.).....					
	Vulcanized Fiber Company. (See Hoeffcker, John S., assignor.).....					
210, 827	Wabash School Furniture Company. (See Curtis, Rowland K., assignor.).....					
200, 416	Wackernie, Alphonse Edouard, Paris, France. Movable fire-bar for furnaces, &c.....	Dec. 10, 1878	475	134	14	895
	Waddell, James O., Newark, N. J. Faucet.....	Feb. 19, 1878	546	161	13	333
202, 308	Waddell, R. S., et al. (See Kerr, Christopher C., assignor.).....	Apr. 9, 1878	475	139	13	672
	Waddill, Abel K., Denison, Tex. Car-seat lock.....					
207, 697	Waddle, Matthew. (See Sample, Grantham, Ward & Waddle.).....					
	Wade, Sedgwick M., Andover, assignor to self, George J. Record, Conneaut, and Lyman Luce, Kingsville, Ohio. Hinge.....	Sept. 3, 1878	112	34	14	363
201, 576	Wade, Thomas I., assignor of one-half interest to Theodore A. McCormick, Stilson, Kans. Plow.....	Mar. 19, 1878	791	241	13	543
	Wade, William H., et al. (See Heckmann, Louis, assignor)..... (Reissue.)					
	Same..... same.....					
207, 834	Wadleigh, Simon F., Oren N. and George S. Roberts, Meredith, N. H. Plow.....	Sept. 10, 1878	266	83	14	386
206, 986	Wadlington, John Mahlon, Upton Station, Ky. Tobacco-hoister.....	Aug. 13, 1878	347	107	14	253
205, 426	Wadsworth, David D., Columbus, Nebr. Wind-engine.....	June 25, 1878	1075	818	13	1166
200, 366	Wadsworth, Herbert, Hohokus Township, Bergen County, N. J., assignor to Hopkins & Dickinson Manufacturing Company, New York, N. Y. Lock for sliding doors.....	Feb. 12, 1878	490	144	13	316
203, 222	Wadsworth, Herbert, Hohokus, N. J., assignor to William H. Rockwell, New York, N. Y. Master-key lock.....	Apr. 30, 1878	1471	430	13	814
				431		
203, 223	Same..... Extension-key.....	Apr. 30, 1878	1473	431	13	814
203, 224	Wadsworth, Herbert, Geneseo, N. Y. Cut-off.....	Apr. 30, 1878	1474	431	13	814
				432		
199, 005	Wageoner, George W., Memphis, Mo. Bee-hive.....	Jan. 8, 1878	296	87	13	61
	Wagner, Anna G. (See Wagner, Ausbert H., assignor.).....					
205, 322	Wagner, Ausbert H., assignor to Anna G. Wagner, Chicago, Ill. Grinding-mill.....	June 25, 1878	968	287	13	1152
201, 136	Wagner, David S., Carlisle, Pa. Cultivator.....	Mar. 12, 1878	322	99	13	470
205, 928	Wagner, Hermann, Elizabeth, N. J. Parlor-fountain.....	July 9, 1878	517	147	14	78
	Wagner, John. (See Tubbs & Wagner.).....					
202, 309	Wagner, John, Grand Rapids, Wis. Saw-sharpening machine.....	Apr. 9, 1878	476	139	13	670

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204, 464	Wagner, John P., Cleveland, Ohio. Machine for making fire-kindlers.....	June 4, 1878	47	15	13	1019
207, 321	Wainwright, Abel, Spring City, Pa. Founder's facing.....	Aug. 20, 1878	698	.....	14	301
203, 965	Wainwright, Charles Cumberson, Bishop Creek, Cal. Medical compound.....	May 21, 1878	790	.....	13	940
208, 774	Wait, Oscar E., Rockport, Mass. Spool and bobbin.....	Oct. 8, 1878	341	98	14	541
210, 977	Same..... Bobbin.....	Dec. 17, 1878	669	184	14	926
204, 114	Waite, Daniel B., assignor to Waite, Smith & Co., Providence, R. I. Button.....	May 21, 1878	948	272	13	959
205, 704	Waite, James H., Orange, Mass. Bill-file.....	July 2, 1878	258	77	14	41
201, 852	Waite, Smith & Co. (See Waite, Daniel B., assignor.)					
201, 852	Waite, William T., assignor of two-thirds interest to G. H. and J. F. Conover, Kansas City, Mo. Piano-action.....	Mar. 26, 1878	1079	328	13	589
204, 465	Waite, Willis C., Burlington, Vt. Needle-wrapper.....	June 4, 1878	48	16	13	1019
8, 217	Wakefield, John E., Worcester, Mass., assignor to Edward W. Vaill. Folding rocking-chair..... (Reissue.)	May 7, 1878	308	88	13	863
200, 953	Wakefield, John E., assignor to E. W. Vaill, Worcester, Mass. Folding chair.....	Mar. 5, 1878	129	42	13	425
201, 723	Wakefield, John E., Worcester, Mass. Folding table.....	Mar. 26, 1878	948	291	13	570
8, 353	Wakeman, Charles E., Pontiac, Mich., assignor of one-half interest to P. A. Hitchcock. Knit fabric for stockings, &c..... (Reissue.)	July 30, 1878	1362	391	14	196
200, 492	Wakeman, Harwood, New York, N. Y. Journal for car-axes, shafting, &c.....	Feb. 19, 1878	620	182	13	344
200, 493	Same..... Armor for flexible tubing.....	Feb. 19, 1878	621	183	13	344
203, 094	Same..... same.....	Apr. 30, 1878	1337	388	13	797
209, 731	Walden, Joseph, and George Platts, Newark, N. J. Machine for folding and shaping leather.....	Nov. 5, 1878	210	63	14	709
209, 732	Same..... Shoe-upper-fitting machine.....	Nov. 5, 1878	213	64	14	709
209, 733	Same..... Leather-folding machine.....	Nov. 5, 1878	215	65	14	710
208, 654	Waldman, George, and David Frank, Allentown, Pa. Combined knife and measuring-rule.....	Oct. 1, 1878	206	59	14	516
203, 225	Waldron, Alexander, New York, N. Y. Water-closet seat.....	Apr. 30, 1878	1476	432	13	814
208, 501	Waldron, Jerome, Clover Hill, N. J. Blast apparatus for stoves.....	Oct. 1, 1878	47	15	14	495
204, 400	Waldron, Sullivan M., et al. (See Byrne, Joseph, assignor.)					
203, 392	Wales, William A., assignor to William B. Fowle, Newton, Mass. Escapement.....	May 28, 1878	1268	361	13	1004
203, 392	Walker, Alexander R., Melbourne, assignor of one-half interest to John McFadyen, Itham, British colony of Victoria. Apparatus for heating water.....	May 7, 1878	165	47	13	843
205, 774	Walker, Alvin. (See Miner & Walker.)					
206, 154	Walker, Charles J., and James A. Horton, assignors to Eagle Metallic Brush Company, Boston, Mass. Brush.....	July 9, 1878	349	101	14	56
201, 569	Walker, Dexter H., New York, N. Y., and C. Calvert Egerton, Baltimore, Md. Electric-signal apparatus for railway-trains.....	July 16, 1878	771	221	14	114
199, 880	Walker, Edward K., Exeter, N. H. Medicine-spoon.....	Mar. 19, 1878	579	178	13	514
209, 995	Walker, Freeman C., Indianapolis, Ind. Carpet-cleaner.....	Jan. 29, 1878	1210	355	13	220
204, 401	Walker, George A., Boston, Mass. Paper-cutting machine.....	Nov. 10, 1878	510	154	14	736
202, 204	Walker, George S. (See Gallaher, Lloyd & Walker.)					
202, 205	Walker, George S., Erie, Pa. Bed-bottom.....	May 28, 1878	1268	361	13	1004
201, 724	Walker, George W., Malden, Mass. Cooking-stove.....	Apr. 9, 1878	368	108	13	655
210, 063	Same..... same.....	Apr. 9, 1878	369	108	13	655
200, 780	Walker, Henry Allison, Ranaleburg, N. C. Saw-cleaner and cotton-gin.....	Mar. 26, 1878	950	291	13	571
209, 309	Walker, Henry E., Fountain, Minn. Grain-separator.....	Nov. 19, 1878	582	174	14	708
199, 335	Walker, Hugh William, and Thomas L. Patterson, Greenock, Scotland. Flavored sirup.....	Feb. 26, 1878	929	.....	13	399
207, 322	Walker, Hugh William, and Thomas L. Patterson, Greenock, North Britain. Centrifugal machine for purifying and refining sugar.....	Oct. 22, 1878	937	273	14	631
210, 376	Walker, James C., Livonia, and Thomas H. Hunt, Alpena, Mich. Window-screen.....	Jan. 15, 1878	639	186	13	115
210, 377	Walker, James L., Turkey City, Pa. Low-water indicator.....	Aug. 20, 1878	698	208	14	301
199, 599	Walker, James T., Albany, N. Y. Machine for bending horseshoe-blanks.....	Nov. 26, 1878	940	274	14	817
210, 582	Same..... Device for gaging the cutting of horseshoe-blanks.....	Nov. 26, 1878	942	275	14	817
200, 111	Walker, John, assignor to C. M. Drennan, Boston, Mass. Ventilator and chimney-cap.....	Jan. 22, 1878	915	268	13	167
201, 370	Walker, John D., deceased, Samuel Roberts, administrator, and assignor to John F. Mathews, Stamford, Conn. Fire-kindler.....	Dec. 3, 1878	213	56	14	851
207, 783	Walker, Joseph H., Worcester, Mass. Wax-thread sewing-machine.....	Feb. 5, 1878	222	68	13	267
202, 206	Same..... Device for stretching boot-legs.....	Mar. 19, 1878	580	179	13	514
210, 649	Same..... Plowman's boot.....	Sept. 3, 1878	202	62	14	374
204, 466	Walker, Orrin E., Jamestown, N. Y. Machine for mixing meats.....	Apr. 9, 1878	370	108	13	655
203, 800	Walker, Robert L., Boston, Mass. Furnace and damper-regulator.....	Dec. 10, 1878	295	81	14	870
209, 734	Walker, Samuel, assignor of one-half interest to George F. Hall, Boston, Mass. Shedding mechanism for fancy looms.....	June 4, 1878	48	16	13	1019
200, 633	Walker, Thomas. (See Bancroft & Walker.) (Reissue.)					
202, 662	Walker, Thomas, Philadelphia, Pa. Revolving ore-roaster.....	May 14, 1878	606	169	13	908
208, 442	Walker, William, Aurora, Ill. Lock.....	Nov. 5, 1878	217	65	14	710
198, 917	Walker, William Birchmore, Boston, Mass. Clasp for supporting garments.....	Feb. 26, 1878	776	228	13	376
201, 071	Walkeys, Henry, Syracuse, N. Y. Car-axle.....	Apr. 23, 1878	909	260	13	738
209, 954	Wall, John, Birmingham, and James Newman, Small Heath, near Birmingham, Eng. land. Button and stud.....	Sept. 24, 1878	937	275	14	480
199, 066	Wallace, Edward L., Paterson, assignor of one-half interest to Julia M. Wallace, Oak-ridge, and Solomon S. Denton, Vernon, N. J. Dust-screen holder for car-windows.....	Jan. 1, 1878	201	57	13	39
205, 929	Wallace, Ferrand G., Jackson, assignor to Alfred E. Hawes and John Webster, Detroit, Mich. Bed-stone support for grinding-mills.....	Mar. 5, 1878	249	79	13	452
199, 601	Wallace, George T., Mansfield, Ohio. Table-leaf support.....	Mar. 5, 1878	130	43	13	436
202, 898	Wallace, James I., et al. (See Hoffman, Austin D., assignor.)					
203, 590	Wallace, Joseph, Belfast, Ireland, assignor to I. A. Hopper, Newark, and Thomas Bar-bour, Paterson, N. J. Distilling apparatus.....	Jan. 8, 1878	297	87	13	62
205, 930	Wallace, Julia M., et al. (See Wallace, Edward L., assignor.)					
209, 947	Wallace, Marcus A., et al. (See Duffie, John S., assignor.)					
199, 600	Wallace, Martin Baum, Huntsville, Ala. Pillow.....	July 9, 1878	518	147	14	78
199, 672	Wallace, Robert A. (See Comstock & Wallace.)					
202, 898	Wallace, Samuel. (See McEachern, John D., assignor.)					
203, 590	Wallace & Sons. (See King, John, assignor.)					
205, 930	Wallace, William, and John King, Ansonia, Conn. Gasket.....	Jan. 22, 1878	917	269	13	168
209, 947	Wallach, Antony, New York, N. Y. Swivel-hook.....	Apr. 23, 1878	1137	326	13	766
199, 600	Waller, Charles, jr., Baraboo, Wis. Gate-latch.....	July 2, 1878	131	39	14	26
205, 930	Waller, James B. (See Goodrich, Joseph, assignor.)					
209, 947	Wallick, Washington, Philadelphia, Pa. Ornamenting moldings.....	July 9, 1878	519	147	14	78
199, 600	Wallis, David C., Kendallville, Ind. Wind-engine.....	Nov. 12, 1878	446	135	14	744
199, 672	Wallis, Thomas M., Philadelphia, Pa. Cartridge-capping implement.....	Jan. 22, 1878	916	268	13	167
199, 672	Wells, James R., Chicago, Ill. Heating and ventilating stove.....	Jan. 29, 1878	1018	296	13	190

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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209, 528	Walpuski, Charles, assignor to Joseph Reckendorfer, New York, N. Y. Manufacture of colored crayons.	Oct. 29, 1878	1180	-----	14	660
	Walrath, A. (See Wieting, Archibald, assignor.)					
207, 143	Walser, Charles Joseph, Lancaster, Pa. Horse-detacher.	Aug. 20, 1878	517	156	14	278
206, 844	Walsh, Francis A., Chicago, Ill. Machine for crimping and beading sheet-metal cans.	Aug. 6, 1878	192	61	14	230
202, 311	Walsh, John E., New York, N. Y. Store-house.	Apr. 9, 1878	477	{ 139 140 }	13	670
207, 323	Same. Grain-elevator.	Aug. 20, 1878	298	208	14	301
205, 591	Walsh, Patrick R., Vallejo, Cal. Wagon-axle.	July 2, 1878	132	40	14	26
	Walsh, Thaddeus H. (See Allen, Michael, assignor.)					
200, 676	Walsh, Thomas, Montreal, Quebec, Canada. Rotary water-meter.	Feb. 26, 1878	826	243	13	383
210, 378	Same. .... same.	Nov. 26, 1878	943	275	14	817
207, 919	Walsh, William Henry, Fort Worth, Tex. Gin-saw sharpener.	Sept. 10, 1878	362	110	14	398
205, 084	Walsworth, Luron A., and Egbert F. Merritt, Union City, Mich. Insect and bug gatherer.	July 16, 1878	590	170	14	92
	Walter, Christian. (See Schultes & Walter.)					
	Walter, Joseph E., et al. (See Morrison, Enoch R., assignor.)					
	Walter, Joseph J. (See Baxter, Myron L., assignor.)					
	Walter, Lloyd. (See Border, Daniel, assignor.)					
200, 588	Walter, Rudolph L., Washington, D. C. Drawing-pen.	Feb. 19, 1878	714	210	13	359
202, 310	Walter, William, Latrobe, Pa. Nut-lock.	Apr. 9, 1878	477	139	13	670
205, 222	Same. .... same.	June 25, 1878	864	255	13	1138
205, 705	Same. .... same.	July 2, 1878	258	77	14	41
207, 464	Walter, William, Arcadia, Wash. Broom.	Aug. 27, 1878	864	255	14	326
201, 371	Walter, William Penn, Philadelphia, Pa. Combined bevel, square, and level.	Mar. 19, 1878	581	179	13	514
206, 987	Walters, Eugene A., Walworth, Wis. Hay-carrier.	Aug. 13, 1878	348	107	14	253
	Walthall, L. B. (See Covert, Garner & Walthall.)					
199, 763	Walther, Daniel, Detroit, Mich. Stove-leg.	Jan. 29, 1878	1100	323	13	204
	Walton, Alonzo. (See Siervren, Gustav F., assignor.)					
	Walton Brothers. (See Chandler, Ralph, assignor.)					
199, 602	Walton, Franklin B., Dallas, Tex. Lubricating device.	Jan. 22, 1878	918	269	13	168
200, 233	Walton, George, assignor of one-half interest to James Gordon, Cincinnati, Ohio. Reflector for gas-burners.	Feb. 12, 1878	346	103	13	295
204, 115	Walton, George Slaughter, Alletton, Tex. Bee-hive.	May 21, 1878	949	272	13	959
8, 462	Walton, Jonathan, Brooklyn, assignor to Double Pointed Tack Company, New York, N. Y. Bail-car for pails.	Oct. 22, 1878	947	276	14	632
	Walton, Joseph J. (See Walton, William and Joseph J.)					
	Walton, Thomas. (See Morgan & Walton.)					
201, 072	Walton, Thomas, Wheeling, W. Va. Globe for lamps.	Mar. 5, 1878	250	79	13	453
206, 281	Walton, Thomas, and Archibald W. Paull, Wheeling, W. Va. Tubular lamp and lantern.	July 23, 1878	932	264	14	139
	Walton, Whann & Co. (See Richardson, Charles, assignor.)					
202, 681	Walton, William M. and Joseph J., New York, N. Y. Lamp.	Apr. 23, 1878	908	260	13	738
	Walworth, Caleb C. (See Hayden, James T., assignor.)					
201, 638	Walworth, Caleb C., Boston, Mass. Steam-boiler.	Mar. 26, 1878	871	265	13	558
206, 373	Same. .... Steam-valve.	July 23, 1878	1044	300	14	152
210, 227	Walz, Maximilian, Pittsburg, Pa. Tap-valve.	Nov. 26, 1878	773	229	14	795
	Wands, John C. (See Burnham, John I., assignor.)					
209, 310	Wands, John C., Nashville, Tenn. Roof-battening.	Oct. 22, 1878	939	274	14	631
201, 470	Wansbrough, Edmund, and William W. Speer, assignors to Alexander Speer & Sons, Pittsburg, Pa. Plow-cutter.	Mar. 19, 1878	769	207	13	528
207, 698	Want, Lewis, Golden, Colo. Baby-walker.	Sept. 3, 1878	112	34	14	363
199, 603	Wantz, John B., and Levi W. Strasbough, York, Pa. Washing-machine.	Jan. 22, 1878	919	269	13	168
202, 610	Ward, Asahel F., Philadelphia, Pa. Tape-measure.	Apr. 16, 1878	812	235	13	717
209, 634	Ward, Caleb T., New York, N. Y. Type-writing machine.	Nov. 5, 1878	109	32	14	695
	Ward, Charles. (See Bartlett & Ward.)					
	Ward, Emery. (See Graham & Ward.)					
210, 277	Ward, Frank K., Washington, D. C. Milk-cooler.	Nov. 26, 1878	825	244	14	802
198, 909	Ward, Frederick T., and Thomas Bedworth, Mohawk, N. Y. Spirit-level.	Jan. 1, 1878	194	55	13	38
204, 467	Ward, George A., Conneaut, Ohio. Feed-cooking apparatus.	June 4, 1878	50	16	13	1019
201, 725	Ward, George J., jr., San Francisco, Cal. Cooking apparatus.	Mar. 26, 1878	950	291	13	571
198, 827	Ward, John B., San Francisco, Cal. Hot-air engine.	Jan. 1, 1878	106	30	13	24
209, 735	Ward, John H., Delphos, Ohio. Machine for coiling hoops.	Nov. 5, 1878	218	66	14	710
200, 955	Ward, Patrick J., Saint Mary's, Ind. Cultivator.	Mar. 5, 1878	130	43	13	436
208, 444	Ward, Thomas H., Smethwick, near Birmingham, England. Weighing-scale.	Sept. 24, 1878	939	{ 275 276 }	14	480
201, 312	Ward, William H., Auburn, N. Y. Car-coupling.	Mar. 12, 1878	505	156	13	496
201, 313	Same. .... Car-brake.	Mar. 12, 1878	507	156	13	496
	Ward, William M. (See Sample, Grantham, Ward & Waddle.)					
210, 583	Warden, Benjamin J., Philadelphia, Pa. Carriage-dash.	Dec. 3, 1878	213	56	14	851
204, 926	Warden, John A., Sewickley, Pa. Device for feeding air to furnace.	June 18, 1878	554	161	13	1092
199, 946	Warden, William, Minnesota Junction, Wis. Wire fence.	Feb. 5, 1878	58	19	13	242
199, 947	Same. .... Barbed fence.	Feb. 5, 1878	59	19	13	242
	Warden, William G. (See Armstrong, Charles N., assignor.)					
208, 443	Wardwell, E. Schuyler, assignor to W. C. Collins, Bucksport, Me. Elastic buckle.	Sept. 24, 1878	938	275	14	480
205, 532	Ware, Albert Edson, Hancock, N. H. Sap-bucket.	July 2, 1878	132	40	14	26
201, 137	Waring, Arthur B., Yonkers, N. Y. Curling hat-brims.	Mar. 12, 1878	323	99	13	470
8, 199	Waring, George E., jr., Newport, R. I. Pocket check-book.	Apr. 23, 1878	1166	335	13	770
204, 928	Same. .... Trap for drain, waste, and sewer pipes.	June 18, 1878	556	161	13	1092
200, 112	Waring, John B., Stamford, Conn., assignor of one-half interest to W. O. Allison, New York, N. Y. Mechanism for opening and closing doors or covers of hoistways.	Feb. 5, 1878	224	68	13	267
203, 801	Waring, John B., and Jay F. Darrow, New York, N. Y., and Francis Winters, jr., Saint Paul, Minn.; said Waring assignor to said Darrow and Winters. Hydraulic engine.	May 14, 1878	607	169	13	908
205, 706	Waring, William C., jr., Yonkers, N. Y. Hat.	July 2, 1878	250	77	14	41
203, 831	Wark, David, Rochester, N. Y. Cigarette for medical purposes.	May 21, 1878	680	193	13	925
8, 200	Warker, Thomas, New York, N. Y. Apparatus for drawing effervescent liquids. (Reissue.)	Apr. 23, 1878	1167	335	13	770
	Warlow, Richard, Cleveland, Ohio. Tether.	Nov. 12, 1878	275	82	14	722
209, 783	Warner, A. J. (See Smith, Walter Duane, assignor.)					
209, 918	Warner, Alexander, New York, N. Y. Preparation of boned ham.	Nov. 12, 1878	446	135	14	744
210, 584	Warner, Charles W., assignor of one-half interest to Jacob F. Marks, La Fayette, Ind. Stove-back lining.	Dec. 3, 1878	214	56	14	851
	Warner, Francis F. (See Brady & Warner.)					
8, 513	Warner, George, West Liberty, Iowa, assignor, by mesne assignments, to C. H. & L. J. McCormick, Chicago, Ill. Grain-binder.	Dec. 3, 1878	226	60, 61	14	854
201, 314	Warner, Henry, East Boston, Mass. Music-rack.	Mar. 12, 1878	511	156	13	496

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8, 114	Warner, Ira De Ver, Bridgeport, Conn. Corset..... (Reissue).....	Mar. 5, 1878	263	82	13	454
203, 393	Warner, James, Brooklyn, N. Y. Painting-machine for flat surfaces.....	May 7, 1878	165	48	13	843
202, 312	Warner, James B., assignor to self and George Sharer, Hagerstown, Md. Friction-clutch for loose and tight pulleys.....	Apr. 9, 1878	470	140	13	671
	Warner, Lucien C. (See Tallman, John C., assignor.)					
	Warner, Robert D. (See Yost & Warner.)					
200, 589	Warner, William R., Philadelphia, Pa. Machine for printing pills.....	Feb. 10, 1878	715	210	13	359
203, 523	Warner, William T., Plattsburg, N. Y. Hoisting-bucket.....	May 7, 1878	300	86	13	801
	Warrell, Nicholas. (See Colter & Warrell.)					
206, 282	Warren, Alva Smith, Atlas, Ill. Hedge-plashing machine.....	July 23, 1878	235	204	14	140
	Warren, Amander E. (See Berdan & Warren.)					
	Warren, Andrew, et al. (See Underwood, Flavius J., assignor.)					
205, 707	Warren, Charles T., assignor of one-half interest to George W. Leonard, Atlanta, Ga. Brake for vehicles.....	July 2, 1878	260	78	14	41
	Warren Chemical and Manufacturing Company. (See Kane, Fredrick L., assignor.)					
202, 902	Warren, Cyrus M., Brookline, Mass. Roofing fabric.....	Apr. 23, 1878	1142	327	13	767
202, 493	Warren, Ebenezer Burgess, Philadelphia, Pa. Gravel roof.....	Apr. 16, 1878	673	107	13	703
8, 210	Warren, Edmond A., assignor of one-half interest to Thomas J. Moore, Brooklyn, N. Y. Printer's quoin..... (Reissue).....	May 7, 1878	302	86	13	802
203, 802	Warren, Edmond A., Brooklyn, N. Y. Means of supplying water to buildings.....	May 14, 1878	608	170	13	908
205, 593	Warren, Frank P., Springfield, Mass. Heel-shave for boots and shoes.....	July 2, 1878	133	40	14	26
	Warren, George Washington. (See Puller & Warren.)					
	Warren, John D. (See Molloy & Warren.)					
208, 775	Warren, Joseph A., and Clinton W. Coolidge, Detroit, Mich. Reed-organ.....	Oct. 8, 1878	343	98	14	542
204, 927	Warren, Marlon, Penn Yan, N. Y. Clothes-pin.....	June 18, 1878	556	101	13	1022
	Warren, Walter F. (See Curley & Warren.)					
	Warren, W. L., et al. (See Laird, William A., assignor.)					
210, 278	Warrington, Curtis Hoopes, West Chester, Pa. Land-marker.....	Nov. 26, 1878	826	244	14	802
202, 489	Warrington, Curtis Hoopes, West Chester, Pa. Land-marker.....	Apr. 23, 1878	1138	327	13	767
206, 900	Warrick, Albin, Stapleton, N. Y. Grinding-machine.....	Apr. 23, 1878	1130	327	13	767
202, 901	Same..... Machine for cutting textile fabrics.....	Apr. 23, 1878	1140	327	13	767
204, 651	Same..... Cloth-folding machine.....	July 30, 1878	1355	380	14	195
207, 575	Same..... Tailor's table.....	Aug. 27, 1878	992	290	14	343
209, 736	Same..... Mechanical movement.....	Nov. 5, 1878	210	66	14	710
	Warwick, Thomas. (See Beck & Warwick.)					
207, 228	Wasell, Edward Digby, Nova Scotia, Canada. Pier.....	Aug. 20, 1878	605	182	14	289
201, 964	Wash, James, Mount Sterling, Ill. Bee-hiver.....	Apr. 2, 1878	100	29	13	614
201, 965	Same..... Device for removing bees from honey-boxes.....	Apr. 2, 1878	101	29	13	614
202, 494	Washburn, Albion K., Bridgewater, Mass. Heel-trimming machine.....	Apr. 16, 1878	674	198	13	702
	Washburn, Benjamin D. (See Wilbur, Henry A., assignor.)					
204, 468	Washburn, Benjamin D., Boston, Mass. Sash-pulley.....	June 4, 1878	51	16	13	1019
200, 494	Washburn, Charles F., Worcester, Mass. Barbed fence-wire.....	Feb. 10, 1878	621	183	13	344
202, 709	Washburn, Henry D. (See Johnson, Asahel Alanson, assignor.)					
	Washburn, Martin P., assignor to self and Charles H. Drew, Kingston, Mass. Horse-cleaner.....	Apr. 23, 1878	997	287	13	749
	Washburn & Moen Manufacturing Company. (See Bloomingdale, Joel Y., assignor.)					
	Same..... (See Borst, William E., assignor.)					
	Same..... (See Davis, Charles S., assignor.)					
	Same..... (See Dodge, Thomas H., assignor.)					
	Same..... (See Doolittle, Thomas B., assignor.)					
	Same..... (See Miles, Purches, assignor.)					
	Same..... (See Shortau, Carl, assignor.)..... (Reissue).....					
	Same..... (See Van Derzee, Philip L., assignor.)					
202, 611	Washburne, Oscar, Sing Sing, N. Y. Condenser for cotton-gins.....	Apr. 16, 1878	812	235	13	717
198, 884	Washington, George, Woodberry, Md. Lamp-wick measurer and cutter.....	Jan. 1, 1878	143	41	13	31
203, 966	Waskey, Robert, Blue Ridge, Va. Fan-blower.....	May 21, 1878	790	226	13	940
204, 208	Wasmund, Henry F., Tecumseh, Nebr. Harrow.....	May 28, 1878	1131	324	13	986
209, 311	Wason, Abraham, New Boston, N. H. Machine for making barrel-heads.....	Oct. 22, 1878	940	274	14	631
	Waterbury, C. A. (See Boeklen, Reinhold, assignor.)					
	Waterbury Clock Company. (See Goodrich, Augustus I., assignor.)					
	Same..... (See Northrop, Hiram D., assignor.)					
205, 449	Waterbury, Daniel, and Frank Miller, Kalamazoo, Mich. Harrow-teeth.....	June 25, 1878	1098	825	13	1169
208, 276	Waterbury, Nathaniel, Baltimore, Md. Mold for forming boxes from veneers.....	Sept. 24, 1878	709	225	14	458
201, 577	Waterhouse, Rufus, New York, N. Y. Scarf-ring.....	Mar. 19, 1878	792	241	13	543
207, 324	Same..... Neck-tie.....	Aug. 20, 1878	699	209	14	301
210, 171	Waterman, Jasper A., Reading, Mich. Veneer-cutter.....	Nov. 19, 1878	699	208	14	783
8, 022	Waters, Charles H., Groton, assignor to Clinton Wire Cloth Company, Clinton, Mass. Painting wire-cloth..... (Reissue).....	Jan. 1, 1878	212	.....	13	40
	Same..... Machine-painted wire-cloth..... (Reissue).....	Jan. 1, 1878	213	.....	13	40
	Waters, Horace H. (See Kennedy, Michael, assignor.)					
207, 633	Waters, Horace H., Chicago, Ill. Sieve.....	Sept. 3, 1878	48	15	14	855
201, 966	Waterston, Peter, Edinburgh, Scotland. Sewing-machine.....	Apr. 2, 1878	101	29, 30	13	614
209, 529	Wathen, Louis I., Morganfield, Ky. Flood-gate.....	Oct. 29, 1878	1181	342	14	699
201, 726	Watkeys, Henry, Syracuse, N. Y. Car-axle.....	Mar. 26, 1878	951	291	13	571
203, 967	Same..... Cartridge-loading device.....	May 21, 1878	791	227	13	940
210, 279	Same..... Valve-seat for steam-cylinders.....	Nov. 26, 1878	827	244	14	802
	Watkins, G. A. (See Pattengill, Horace, assignor.)					
	Watkins, Henry J., et al. (See Trowbridge, William F., assignor.)					
202, 313	Watkins, Henry J., assignor to self, William F. Trowbridge, and Wilbur F. Brigham, } Hudson, Mass. Overseaming attachment for sewing-machines..... }	Apr. 9, 1878	480	140	13	671
	Same..... Wax-thread sewing machine.....	Apr. 9, 1878	482	141	13	671
201, 138	Watkins, John, and John R. Carey, Somerville, Mass. Nutmeg-grater.....	Mar. 12, 1878	824	99	13	470
203, 302	Watkins, John R., Baltimore, Md. Door-check.....	May 7, 1878	72	23	13	830
205, 932	Watkinson, George, assignor to L. Candee & Co., New Haven, Conn. India-rubber boot.....	July 9, 1878	520	148	14	78
208, 776	Same..... India-rubber boot and shoe.....	Oct. 8, 1878	344	96	14	542
209, 312	Same..... India-rubber boot.....	Oct. 22, 1878	941	275	14	631
203, 226	Watson, Chauncey R., Indianapolis, Ind. Grain-car door.....	Apr. 30, 1878	1477	432	13	815
205, 450	Watson, Edward J., Greenbush, N. Y., and Frank Armstrong, Bridgeport, Conn. Animal-shearing machine.....	June 25, 1878	1099	325	13	1169
210, 172	Watson, Edwin Judson, and Paul Bauer, Worcester, Mass. Piano-forte string.....	Nov. 19, 1878	700	288	14	782
	Watson, James. (See Chapman, Joseph L., assignor.)					
207, 784	Watson, James, Greenwich, England. Pump-valve.....	Sept. 3, 1878	203	62	14	374
209, 530	Watson, Jeremiah M., Sharon, Mass. Shoe-shank stiffener.....	Oct. 29, 1878	1181	342	14	699
	Watson, Samuel. (See Ogborn, Harrison, assignor.)					



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199, 007	Watson, Thomas A., Boston, Mass. Telephone .....	Jan. 8, 1878	298	87	13	62
209, 592	Watson, Thomas A., assignor to Gardiner G. Hubbard, trustee, Boston, Mass. Automatic switch or cut-out for telephones .....	Nov. 5, 1878	58	17	14	688
210, 886	Watson, Thomas A., Boston, Mass. Polarized armature for electric bells .....	Dec. 17, 1878	559	156	14	913
202, 495	Watson, Thomas Augustus, Boston, Mass. Telephone call-signal apparatus .....	Apr. 16, 1878	675	198	13	703
211, 077	Watson, Thomas Talbot, Richmond, Va. Fastening for tobacco-bags .....	Dec. 17, 1878	793	218	14	941
205, 931	Watson, William. (See Caldwell & Watson.)	July 9, 1878	520	147	14	78
204, 402	Watson, William, Detroit, Mich. Door-check .....	May 28, 1878	1269	361 362	13	1004
206, 374	Same. Metallurgic furnace .....	July 23, 1878	1044	300	14	152
199, 764	Watson, Willoughby W., Montrose, Pa. Calendar .....	Jan. 29, 1878	1101	323	13	204
	Watson, W. J. (See Keeler, Sanford, assignor.)					
	Watson, W. S., et al. (See Batchelder, Asahel G., assignor) .....					
202, 903	Watt, George, sr., Richmond, Va. Harrow .....	Apr. 23, 1878	1143	328	13	767
204, 638	Watt, James H. and Stewart, assignor to selves and J. W. Watt, Barnesville, Ohio. Car-wheel .....	June 4, 1878	214	68	13	1043
	Watt, J. W. (See Watt, James H. and Stewart, assignors.)					
203, 968	Watt, Sern P., Jamestown, Nebr. Velocipede .....	May 21, 1878	793	227	13	940
202, 683	Watt, Stewart. (See Watt, James H. and Stewart.)					
	Watters, John, New York, N. Y. Buckle-loop and fastener for carriage-tops, harness, &c. ....	Apr. 23, 1878	910	260	13	738
208, 550	Watters, John, New York, N. Y. Box-loop .....	Oct. 1, 1878	92	27	14	501
205, 451	Watters, Joseph, Fall River, Mass. Stopping mechanism for looms .....	June 25, 1878	1100	325	13	1169
	Watters, William. (See Edgecomb, Edward F., assignor.)					
	Watterson, James A. (See Morel & Fletcher, assignors.)					
199, 604	Wattles, Joseph W., Canton, Mass. Spinning-ring .....	Jan. 22, 1878	920	209	13	168
200, 155	Same. Spinning-ring holder .....	July 16, 1878	772	221	14	114
206, 755	Same. Spinning-frame ring .....	Aug. 6, 1878	57	31	14	219
206, 968	Same. Spinning-ring .....	Aug. 13, 1878	349	107	14	253
8, 124	Watts, Joseph E., Lawrence, Mass. Steam or water pressure regulator. (Reissue) ..	Mar. 12, 1878	526	161	13	498
	Watts, Noah P. (See Thompson, Dickey & Watts.)					
210, 440	Way, F. K., et al. (See Way, Thomas R., assignor.)					
203, 803	Way, Theodore B., Troy, N. Y. Draft-deflecting plate in cooking-stoves .....	Dec. 3, 1878	52	13	14	831
205, 985	Way, Thomas R., assignor to self, F. K. Way, and James Todd, Springfield, Ohio. Clothes-wringer .....	May 14, 1878	600	170	13	908
201, 315	Way, Thomas R., Springfield, Ohio, assignor of one-half interest to Angus McKay and P. H. Ellsworth, Hot Springs, Ark. Stove-pipe ventilator .....	July 16, 1878	591	170	14	92
	Way, William J., assignor of one-half interest to T. C. Chapman, Berlin Heights, Ohio. Sash-holder .....	Mar. 12, 1878	512	157	13	496
207, 920	Wayland, Eli. (See Fleming, Wayland & Gilliland.)					
	Wayland, Eli, and Larkin M. Berry, Salisbury, Mo. Vehicle-axle lubricator .....	Sept. 10, 1878	364	111	14	398
205, 223	Weade, James W. (See Harris, Joshua Washington, assignor.)					
200, 756	Weatherbee, James, and Isaac Mowder, Port Washington, Ohio. Vegetable-cutter .....	June 25, 1878	864	255	13	1138
209, 593	Weaver, David H., and Martin Heatwole, Spring Creek, Va. Rein-holder .....	Aug. 6, 1878	98	31	14	219
210, 585	Weaver, James H., Chicago, Ill. Envelope .....	Nov. 5, 1878	59	18	14	688
210, 586	Weaver, James H., and De Witt W. Judson, Chicago, Ill. Mail-bag .....	Dec. 3, 1878	215	57	14	851
209, 093	Same. ....	Dec. 3, 1878	216	57	14	851
207, 921	Weaver, John C., New York, N. Y. Running-gear for railway-cars .....	Oct. 15, 1878	704	204	14	594
	Webb, Loren Monroe, and Edwin Tinker, Tuscarora, N. Y. Car-coupling .....	Sept. 10, 1878	364	111	14	398
204, 865	Webb, Rodolphus L. (See Mosman & Webb.)					
	Webb, Rodolphus L., assignor to Landers, Frary & Clark, New Britain, Conn. Coffee-mill .....	June 11, 1878	467	135	13	1077
204, 403	Webb, William Hamilton, Conneaut, Ohio. Machine for planing and sawing wood .....	May 28, 1878	1270	362	13	1004
206, 999	Webb, William A., assignor to George P. Jewett, Wadley, Ga. Stump-puller .....	Oct. 15, 1878	597	174	14	580
200, 680	Webber, Charles C., assignor to Joel S. Webber, Holyoke, Mass. Felling-roll .....	May 14, 1878	477	135	13	892
204, 778	Webber, Henry A., Rockton, Ill. Grain-separator .....	June 11, 1878	371	111	13	1066
	Webber, Joel S. (See Webber, Charles C., assignor.)					
202, 207	Weber, Adolph, Detroit, Mich. Hose-nozzle .....	Apr. 9, 1878	370	109	13	655
	Weber, E. P. (See Armstrong, Woodward & Muthes, assignors.)					
200, 883	Weber, Eugene Rudolph, San Francisco, Cal. Watch-maker's oil-cup .....	Mar. 5, 1878	68	24	13	425
200, 417	Weber, Franz Christian, Brooklyn, and Frederick Kruse, New York, N. Y. Vest of paper and other material .....	Feb. 19, 1878	547	162	13	333
203, 679	Weber, George Egbert, Opelika, Ala. Car-coupling .....	May 14, 1878	476	135	13	892
206, 909	Weber, John, et al. (See Vernland, Claudius, assignor.)					
	Weber, Joseph Peter, Saint Paul, Minn. Whitewashing-machine .....	Aug. 13, 1878	279	85	14	244
207, 374	Weber, Louis, et al. (See Schall, William H., assignor.)					
	Webster, Albert G., Brandon, assignor of one-half interest to John M. Goodnough, Pittsford, Vt. Rock-channeling machine .....	Aug. 27, 1878	766	228	14	315
201, 073	Webster, Charles M., assignor to Nelson Lyon, Albany, N. Y. Show-bracket for drawers and boxes .....	Mar. 5, 1878	251	79	13	453
203, 804	Webster, Edward S., Durand, Ill. Fence-post .....	May 14, 1878	610	170	13	908
200, 634	Webster, Eugene A., Springfield, assignor to G. H. Stark, Palmer, Mass. Name-plate for door-knobs, &c. ....	Feb. 26, 1878	776	229	13	376
206, 652	Webster, John, et al. (See Wallace, Ferrand G., assignor.)					
	Webster, John Calhoun, Wilton, Me. Potato-digger .....	July 30, 1878	1357	390	14	195
	Webster, John H. (See Stillman & Webster.)					
200, 234	Webster, Ursula L., New Haven, Conn. Adjustable pattern for garments .....	Feb. 12, 1878	347	104	13	295
198, 910	Webster, William D., St. Catharines, Ontario, Canada. Hand-hoe .....	Jan. 1, 1878	105	55	13	38
	Webster, William P. (See Hart & Webster.)					
202, 315	Wecker, Carl Theodor, Offenbach, Germany. Vehicle-wheel hub .....	Apr. 9, 1878	484	142	13	671
209, 531	Weed, Alfred, assignor to self and George and Henry Barnett, Philadelphia, Pa. File-cutting machine .....	Oct. 29, 1878	1182	343	14	669
200, 113	Weed, Charles, assignor to Davidson Rubber Company, Charlestown, Mass. Cut-off for flexible pipes .....	Feb. 5, 1878	226	69	13	267
204, 469	Weed, Charles, assignor to Davidson Rubber Company, Boston, Mass. Atomizer .....	June 4, 1878	52	17	13	1020
200, 653	Weed, Charles, Charlestown, assignor to Davidson Rubber Company, Boston, Mass. Syringe apparatus .....	July 30, 1878	1357	390	14	195
201, 471	Weed, Clinton A., assignor to Case, Whiting & Co., Racine, Wis. Plow .....	Mar. 19, 1878	680	207	13	528
202, 387	Weed, Clinton A., Racine, Wis. Pillow-sham .....	Apr. 16, 1878	573	168	13	683
204, 176	Weed, Fitch, Lynn, Mass. Cutting-board .....	May 28, 1878	1037	295	13	974
203, 095	Weed, James William, assignor to self and Granville H. Currier, Prescott, Iowa. Check-piece for headstalls .....	Apr. 30, 1878	1337	389	13	797
199, 881	Weed, Louisa A., Brooklyn, N. Y. Paper pillow-sham .....	Jan. 29, 1878	1211	355	13	220



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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & E.	Vol.	Page.
207, 576	Weeden, William N., assignor to Benedict & Burnham Manufacturing Company, Waterbury, Conn. Lamp-burner	Aug. 27, 1878	996	291	14	343
200, 738	Same..... same	Nov. 5, 1878	221	67	14	710
205, 018	Weeks, Christoph, Saint Charles, Mo. Heater	June 18, 1878	638	188	13	1104
	Weeks, Henry R. (See Harria, William, assignor.)					
204, 177	Weeks, John, Buffalo, N. Y. Scale-beam	May 28, 1878	1037	295	13	974
202, 079	Weems, Thadous Pembroke Somerset, Youngers, Mo. Cultivator	Apr. 2, 1878	218	64	13	630
199, 605	Wegmann, Fedrico, Naples, Italy. Machine for preparing and treating middlings	Jan. 22, 1878	921	270	13	168
210, 587	Wehrle, Frank Joseph. (See Horn, Schaefer & Wehrle.)					
	Wehrle, Robert, Saint Louis, Mo. Sewing-machine caster	Dec. 3, 1878	217	57	14	851
	Wehrli, John. (See Gröbli, Cafilisch & Wehrli.)					
	Same..... (See Gröbli, Rieter & Wehrli.)					
	Same..... (See Rieter, Wehrli & Gröbli.)					
205, 708	Weiland, Benjamin, assignor of one-half interest to Joseph Whiteley, Philadelphia, Pa. Carpet fabric	July 2, 1878	261	78	14	41
201, 853	Weible, Charles E., Saint Petersburg, Pa. Working-barrel for oil-pump	Mar. 26, 1878	1080	328	13	580
199, 882	Weichhart, John, San Francisco, Cal. Hay-cutter	Jan. 29, 1878	1211	356	13	220
210, 050	Same..... Lawn-rake	Dec. 10, 1878	296	81	14	871
199, 127	Weickel, Charles. (See Weickel, Simon J. and Charles.)					
209, 737	Weickel, Simon J. and Charles, Laclede, Mo. Corn-planter and seed-drill	Jan. 8, 1878	410	123	13	81
	Weide, Alexander, Chicago, Ill. Horse-tail protector	Nov. 5, 1878	221	66	14	710
208, 502	Weidmann, Anton. (See Dahler & Hoffman, assignors.)					
	Weidmann, Jacob, Paterson, N. J. Machine for beating silk	Oct. 1, 1878	47	15, 16	14	496
	Weiffenbach, George Henry. (See Hansen & Weiffenbach.)					
	Weigand, Anton. (See Schreiber & Weigand.)					
210, 070	Weimar, Jacob, assignor to Herring & Co., New York, N. Y. Time-lock	Nov. 19, 1878	593	177	14	767
201, 854	Weimer, Jacob, West Alexandria, Ohio. Double vertical mill	Mar. 26, 1878	1081	{ 328 } { 329 }	{ 13 } { 13 }	{ 589 } { 589 }
201, 967	Weinlagen, Henry, Brooklyn, N. Y. Atomizer	Apr. 2, 1878	102	30	13	614
209, 436	Weinman, George W., Columbus, Ohio. Balance-valve	Oct. 29, 1878	1081	{ 314 } { 315 }	{ 14 } { 14 }	{ 655 } { 655 }
203, 960	Weinreich, Arno. (See Rump & Weinrich.)					
	Weir, Patrick T., New York, N. Y. Measuring attachment for refrigerating milk-wagons	May 21, 1878	793	227	13	940
	Weir Plow Company. (See Wilder, Charles O., assignor.)					
	Weis, Joseph. (See Bevins, Weis & Phillips.)					
202, 080	Weismantel, Valentin. (See Engelke, Feiner & Weismantel.)					
	Weiss, Albert Richard, Brooklyn, N. Y. Bottle-stopping machine	Apr. 2, 1878	220	64	13	630
200, 956	Weiss, Charles H. (See Romig, William B., assignor.)					
209, 000	Weiss, Charles H., Eckley, Pa. Brako for light vehicles	Mar. 5, 1878	132	43	13	436
203, 970	Weiss, Thomas, Bethlehem, Pa. Hoe	Oct. 15, 1878	598	174	14	560
205, 452	Weissenborn, Edward, Hoboken, N. J. Bird-cage	May 21, 1878	794	228	13	940
	Wekerle, August, assignor to self and Simon Klingler, New York, N. Y. Barber's chair	June 25, 1878	1100	326	13	1100
	Welch, E. Baker. (See Anders, George Lee, assignor.)					
	Welch, Edward P., et al. (See Varns, Harvey B., assignor.)					
	Same..... (See Welch, Rosia W., assignor.)					
	Welch, James H., et al. (See Varns, Harvey B., assignor.)					
	Same..... (See Welch, Rosia W., assignor.)					
205, 010	Welch, James H., Georgetown, D. C. Bottle-register	June 18, 1878	639	188	13	1104
205, 158	Same..... same	June 18, 1878	783	232	13	1123
208, 216	Welch, J. Hart, Hartford, Conn. Clock-case	Sept. 17, 1878	688	202	14	445
200, 739	Welch, Rosia W., et al. (See Varns, Harvey B., assignor.)					
	Welch, Rosia W., assignor of four-fifths interest to Edward P. and James H. Welch, James P. Willett, and Charles Reed, Georgetown, D. C. Rail	Nov. 5, 1878	222	67	14	711
200, 635	Welch, Samuel. (See Hoffman, Fredrick A., assignor.)					
199, 242	Welch, Thomas C., Cincinnati, Ark. Washing-machine	Feb. 26, 1878	777	229	13	376
210, 720	Welch, William S., Westfield, N. J. Size for calcimining	Jan. 15, 1878	541		13	100
201, 139	Weldon, Spencer S., Rockford, Ill. Cream-raising apparatus	Dec. 10, 1878	375	103	14	881
207, 144	Weller, John C., Valparaiso, Ind. Coffee-pot	Mar. 12, 1878	325	99	13	470
	Weller, William F., Liverpool, N. Y. Root-cutter	Aug. 20, 1878	519	156	14	278
210, 588	Wellendorf, Louis. (See Schneider, Alexander, assignor.)					
199, 765	Welling, William J., Niles, Mich. Plow-jointer	Dec. 3, 1878	218	58	14	851
209, 996	Wellington, Darius, Boston, assignor, to E. C. Aldrich, Hyde Park, Mass. Lavatory apparatus	Jan. 29, 1878	1102	323	13	204
200, 636	Wellington, Darius, Boston, Mass. Water-closet	Nov. 19, 1878	511	155	14	756
203, 805	Wellington, Henry, Green Point, N. Y. Gasoline cooking-stove	Feb. 26, 1878	778	229	13	376
	Wellington, Henry, Green Point, and William Bourke, New York, N. Y. Cigar-lighter	May 14, 1878	611	{ 170 } { 171 }	{ 13 } { 13 }	{ 908 } { 908 }
203, 394	Wellman, David L., Frazee City, Minn. Cultivator	May 7, 1878	167	48	13	843
207, 325	Wellman, Prosper E., Saint Petersburg, Pa. Torpedo for oil-wells	Aug. 20, 1878	700	209	14	301
201, 211	Wollman, Samuel T., Cleveland, Ohio. Roll for rolling plate metal	Mar. 12, 1878	392	121	13	481
208, 051	Same..... Hydraulic crane	Sept. 17, 1878	515	{ 153 } { 154 }	{ 14 } { 14 }	{ 423 } { 423 }
207, 229	Wells, Chandler J., Buffalo, N. Y. Apparatus for unloading sand, grain, &c., from vessels	Aug. 20, 1878	606	182	14	289
200, 204	Same..... Machine for unloading grain from vessels	Oct. 22, 1878	840	242	14	617
204, 630	Wells, Charles S., New Haven, Conn. Lighting apparatus	June 4, 1878	214	69	13	1043
210, 173	Wells, Clark A., Boston, Mass. Horseshoe-pad	Nov. 19, 1878	700	208	14	782
210, 280	Wells, Edward, Albert E. Richardson, William J. Van Patten, and Henry Wells, Burlington, Vt. Refining and packing catechu	Nov. 26, 1878	828	244	14	802
207, 326	Wells, Frank A., Memphis, Tenn. Automatic boiler-feeder	Aug. 20, 1878	702	209	14	301
199, 673	Wells, Frank O. (See Wells, Frederic E. and Frank O.)					
199, 884	Wells, Frederic E. and Frank O., Greenfield, Mass. Screw-cutting die	Jan. 29, 1878	1010	297	13	101
199, 883	Wells, George W., Middletown, Conn. Thill-coupling	Jan. 29, 1878	1213	356	13	221
198, 958	Wells, Gus A., Hopkineville, Ky. Writing-ink	Jan. 29, 1878	1212		13	221
	Wells, Gustavus V., Monmouth, Ill. Boot and shoe nailing last	Jan. 8, 1878	248	71	13	54
203, 807	Wells, Henry. (See Wells, Richardson, Van Patten & Wells.)					
	Wells, Isaac, East Hampton, Conn., assignor of one-half interest to James F. Post, Wilmington, N. C., and D. D. Barber, Sumter County, S. C. Drench-wheel for hides and skins	Feb. 26, 1878	955	281	13	403
203, 570	Same..... Railway-chair	May 14, 1878	372	105	13	679
204, 640	Wells, James C., Warren, Pa. Balanced valve for steam-engine	June 4, 1878	215	69	13	1043
203, 777	Wells, Joseph, Dunkirk, assignor to Samuel G. Stryker, Elmira, N. Y. Washing-machine	Oct. 8, 1878	344	99	14	542

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. E.	Vol.	Page.
202, 368	Wells, Joseph A., Oakland, Cal. Band-saw guide .....	Oct. 29, 1878	1014	295	14	645
206, 845	Wells, Osborn, Newberry, S. C. Self-waiting table .....	Aug. 6, 1878	193	61	14	230
205, 709	Wells, Osborn, Newberry, S. C. Coupling for the joints of logs .....	July 2, 1878	262	78	14	41
205, 933	Wells, Parker, Lynn, Mass. Piston water-meter .....	July 9, 1878	521	148	14	78
209, 150	Wells, Reuben, assignor to self and Joseph W. Sprague, Jeffersonville, Ind. Car-axle-box lid .....	Oct. 22, 1878	785	228	14	610
209, 843	Wells, William Washington, assignor to Danntless Manufacturing Company, Norwalk, Ohio. Sewing-machine .....	Nov. 12, 1878	339	101	14	730
210, 174	Welsh, Henry Harrison, and John Charles Schwencck, Nevada, Ohio. Horse hay-fork .....	Nov. 19, 1878	701	207	14	782
206, 989	Welsh, John C., assignor to self and Wilson M. Welsh, Stokes Station, Ill. Sulky-plow .....	Aug. 13, 1878	350	107	14	253
	Welsh, T. W., et al. (See Westinghouse, George, jr., assignor.)					
	Welsh, Wilson M. (See Welsh, John C., assignor.)					
205, 159	Wemple, George W., West Union, Iowa. Horse-boot .....	June 18, 1878	784	232	13	1123
	Wendel, August. (See Hunt & Wendel.)					
	Wendell, Fred. H. (See Darling, Parshall & Wendell.)					
206, 156	Wenderoth, Ernst, Bremen, Germany. Process and apparatus for coloring tobacco-leaves .....	July 16, 1878	773	221	14	115
208, 871	Wendes, Wilhelm, August Vogt, and Rudolph Richter, Greifenberg, Silesia, Germany. Device for splitting cigar-ends .....	Oct. 8, 1878	451	130	14	556
	Wenger, J. B. (See Coffee, George Holland, assignor.)					
207, 230	Wenner, John W. (See Henderson, Simson Sturgen, assignor.)					
208, 003	Wensley, James, Philadelphia, Pa. Sewing-machine .....	Aug. 20, 1878	677	182	14	289
202, 612	Wenzel, Adolph C., Brooklyn, N. Y. Apparatus for holding grain-nickel anodes .....	Sept. 10, 1878	452	136	14	409
	Wenzel, Adolphus E., Callicoon, N. Y. Bee-hive .....	Apr. 16, 1878	813	235	13	717
109, 885	Weolrheide, Henry F. (See Sursa, James W., assignor.)					
	Werdermann, Richard, London, England. Electro-magnetic traction device for locomotives .....	Jan. 29, 1878	1214	356	13	221
208, 130	Werne, Henry L., Louisville, Ky. Curtain-roller and bracket .....	Sept. 17, 1878	595	177	14	434
200, 009	Werner, John F., assignor to William C. Spellman, New York, N. Y. Clock-advertiser .....	Feb. 5, 1878	112	37	13	251
200, 590	Werner, Romeo B., Saint Joseph, Mo. Combined planter, land-roller, and fertilizer-distributor .....	Feb. 19, 1878	716	211	13	359
207, 922	Wertman, Daniel K., Mount Carmel, Pa. Harness .....	Sept. 10, 1878	365	111	14	398
	Wesseler, John F. (See Wiggers & Wesseler.)					
210, 381	Wessell, Otto, Adam Nickel, and Rudolph Gross, New York, N. Y. Piano-forte damper-action .....	Nov. 26, 1878	947	276	14	817
204, 404	Wessmann, Charles B., Newbridge, N. J. Game-counter .....	May 28, 1878	1271	362	13	1004
	Wesson, Daniel B. (See Bullard, James H., assignor.)					
	Same. (See Joslyn, Benjamin F., assignor.)					
202, 388	Wesson, Daniel B., Springfield, Mass. Lock for fire-arms .....	Apr. 16, 1878	573	168	13	688
204, 116	West, Alonzo H., Hamilton, N. Y. Soap .....	May 21, 1878	950		13	959
208, 655	West, Andrew, Birmingham, Iowa. Station-indicator .....	Oct. 1, 1878	207	59	14	516
205, 020	West, Arnold J., West's Mills, Mich. Seed-planter .....	June 18, 1878	641	188	13	1104
203, 227	West, Columbus, Pittsburg, Pa. Door-check for carriages, &c. ....	Apr. 30, 1878	1478	432	13	815
203, 513	West, Elisha, Lockport, N. Y. Faucet .....	May 7, 1878	289	83	13	860
207, 517	West, John T., Athensville, Ky. Colter for grain-drills .....	Aug. 27, 1878	997	291	14	343
200, 637	West, Jonathan B., Geneseo, N. Y. Machine for setting tires .....	Feb. 26, 1878	782	230	13	377
201, 372	Same. Screw-driver .....	Mar. 19, 1878	582	179	13	514
205, 775	West, Lucius C., Kalamazoo, Mich. Plaiting-machine .....	July 9, 1878	350	101	14	56
210, 228	Same. Button-hook .....	Nov. 26, 1878	774	229	14	795
199, 336	West, Marshall Cyrenus, Spencer, assignor of one-half interest to Frank Ferris, Oswego, N. Y. Platform-spring .....	Jan. 15, 1878	640	187	13	115
202, 771	West, Thomas P., Danvers, Mass. Sewing-machine presser-foot .....	Apr. 23, 1878	998	287	13	750
199, 886	West, Webster B., Wilmington, Ohio. Rubber cushion for vehicle-springs .....	Jan. 29, 1878	1215	357	13	221
202, 684	West, William, and William Frederick Spittle, Birmingham, England. Button .....	Apr. 23, 1878	911	260	13	738
210, 379	Westbrook, Abraham D., Lambertville, N. J. Rubber belting .....	Nov. 26, 1878	944	275	14	817
	Westbrooks, A., et al. (See Davis, Van R., assignor.)					
	Westbrooks, J. C., et al. (See Davis, Van R., assignor.)					
	Westbrooks, W. A., et al. (See Davis, Van R., assignor.)					
203, 986	Westcott, Charles S., Philadelphia, Pa. Type .....	July 16, 1878	591	170	14	93
210, 978	Same. Instrument for cleaning combs .....	Dec. 17, 1878	670	184	14	926
205, 453	Westcott, Isaac and Jenn, Antwerp, N. Y., assignors to Malvin M. Westcott. Butter-tub .....	June 25, 1878	1101	326	13	1169
	Westcott, Jenn. (See Westcott, Isaac and Jenn.)					
201, 578	Westcott, John M., and Jacob L. Halteman, assignors to Hoosier Drill Company, Milton, Ind. Seeding-machine .....	Mar. 19, 1878	793	241	13	543
	Westcott, Malvin M. (See Westcott, Isaac and Jenn, assignors.)					
202, 905	Westcott, Norman, Morrisville, N. Y. Fence .....	Apr. 23, 1878	1144	328	13	767
207, 578	Westerbeck, Frederick, Saint Louis, Mo. Can for oils, &c. ....	Aug. 27, 1878	968	291	14	343
	Western Electric Manufacturing Company. (See Farrar, Ward B., assignor.)					
	Western Union Telegraph Company. (See Edison, Thomas A., assignor.)					
	Western Union Telegraph Company et al. (See Smith, Gerritt, assignor.)					
204, 117	Westerman, Conrad L., Bloomington, Ill. Egg-tester .....	May 21, 1878	951	272	13	960
206, 509	Westervelt, Peter A., College Grove, Tenn. Bee-hive .....	July 30, 1878	1206	346	14	177
210, 829	Westgate, Joseph D., Lynn, Mass. Apparatus for trimming the sole edges of boots and shoes .....	Dec. 10, 1878	477	135	14	895
8, 291	Westinghouse, George, jr., Pittsburg, Pa. Pipe-coupling .....	June 18, 1878	798	236	13	1125
205, 710	Westinghouse, George, jr., assignor of four-tenths interest to Ralph Bagley, H. H. Westinghouse, T. W. Welsh, J. Caldwell, and S. H. Sprague, Pittsburg, Pa. Governor for marine engines .....	July 2, 1878	262	78	14	41
	Westinghouse, H. H., et al. (See Westinghouse, George, jr., assignor.)					
209, 949	Westlake, John Alfred, Cooperstown, N. Y. Swinging barrels, casks, &c., beneath counters .....	Nov. 12, 1878	447	136	14	745
206, 061	Westland, Charles S., Providence, R. I. Lamp .....	July 16, 1878	666	192	14	102
203, 303	Westmacott, Percy G. B., Elswick, England. Machinery for working masses of metal .....	May 7, 1878	73	22	13	830
8, 488	Weston, David M., Boston, Mass. Self-balancing centrifugal machine .....	Nov. 12, 1878	457	138	14	746
8, 489	Same. (Reissue.)					
	Weston Dynamo-Electric Machine Company. (See Weston, Edward, assignor.)					
8, 102	Weston, Edward, assignor of one-half interest to Roberts & Havell, Newark, N. J. Dynamo-electric machine .....	Feb. 26, 1878	966	284	13	405
8, 141	Same. Dynamo-electric machine .....	Mar. 26, 1878	1104	334	13	592
201, 140	Weston, Edward, Newark, N. J. Oiler .....	Mar. 12, 1878	326	160	13	471

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201, 968	Weston, Edward, assignor to Weston Dynamo-Electric Machine Company, Newark, N. J. Dynamo-electric machine.	Apr. 2, 1878	103	30, 31	13	614
209, 094	Same.....Dynamo-electric machine	Oct. 15, 1878	706	{ 204 205 }	14	594
209, 532	Same.....same	Oct. 29, 1878	1184	344	14	699
210, 380	Same.....Electric lights	Nov. 26, 1878	944	{ 273 276 }	14	817
211, 070	Weston, Edward, Newark, assignor to Edward E. Quimby, Orange, N. J. Manufacture of metallic nickel	Dec. 17, 1878	786	.....	14	949
211, 071	Same.....Nickel-plating	Dec. 17, 1878	787	.....	14	949
210, 730	Weston, Ephraim F., assignor to Union Hardware Company, Wolcottville, Conn. Skate.	Dec. 10, 1878	376	103	14	881
210, 281	Weston, Joseph R., Cincinnati, Ohio. Safety pulley-block	Nov. 26, 1878	820	245	14	802
202, 904	Weston, William Le Roy, New Milford, Pa. Side-spring vehicle	Apr. 23, 1878	1143	328	13	767
202, 906	Westwater, William. (See Glaze & Westwater.)					
202, 906	Westwood, John T., assignor of one-third interest to Andrew Reitz, Wheeling, W. Va. Elevating cupboard	Apr. 23, 1878	1145	329	13	707
203, 514	Westwood, William J., and George Pfeiffer, South Bend, Ind. Envelope and paper fastener	May 7, 1878	289	83	13	890
207, 923	Westwood, William J., South Bend, Ind. Adjustable sleigh-shoe for wheeled vehicles	Sept. 10, 1878	366	111	14	298
	Wetherbee, George C. (See Booth, John W., assignor.)					
	Wetherbee, J. Otis. (See Baker, Loring J., assignor.)					
200, 808	Wetmore, George C., New York, and Francis S. Rice, Ticonderoga, N. Y. Dry-ore separator	Feb. 26, 1878	956	{ 281 282 }	13	403
206, 202	Wetmore, William W., assignor to Winchester Repeating Arms Company, New Haven, Conn. Magazine fire-arm	July 23, 1878	843	241	14	127
210, 441	Wetzel, Ernst, et al. (See Condon, William F., assignor.)	Dec. 3, 1878	53	13	14	831
205, 934	Wetzel, Wilhelm, New York, N. Y. Hat	July 9, 1878	522	{ 148 149 }	14	79
109, 337	Wey, Herman C., Hiawatha, Kans. Measuring device for shot-canisters	Jan. 15, 1878	640	187	13	116
207, 024	Weyburn, Elbert D., Pittsburg, Pa. Bottle-stopper fastener	Sept. 10, 1878	367	112	14	298
210, 731	Weyer, Auguste, New York, N. Y. Apparatus and process for annealing glass	Dec. 10, 1878	377	.....	14	881
8, 264	Weyer, Claudine Ribod, Lyons, France. Annealing glass	May 26, 1878	1299	960	13	1008
199, 128	Weyman, B. Frank, Pittsburg, Pa. Snuff-package. (Reissue.)	Jan. 8, 1878	420	123	13	81
204, 157	Weyman, George W., Philadelphia, Pa. Plunger for pressing glass	July 10, 1878	774	222	14	115
207, 327	Same.....Glass-press	Aug. 20, 1878	703	209	14	302
207, 465	Weyman, John, Pittsburg, Pa. Rowlock	Aug. 27, 1878	864	255	14	327
208, 352	Weymouth, George F., Dreadsden, Mo. Dumping-wagon	Sept. 24, 1878	844	246	14	468
202, 496	Weymouth, John W., assignor of two-thirds interest to D. R. Ewing and L. M. Sandford, Des Moines, Iowa. Pruning-shears	Apr. 16, 1878	676	198	13	703
203, 229	Whaley, Barnett B., assignor to self and J. Tibbout, Brooklyn, N. Y. Lemon-squeezer	Apr. 30, 1878	1479	433	13	815
205, 454	Wharf, James W. and William W., Detroit, Mich. Burglar-alarm	June 23, 1878	1102	326	13	1169
205, 456	Same.....Sash-holder	June 25, 1878	1102	326	13	1170
	Wharf, William W. (See Wharf, James W. and William W.)					
	Wharton Railroad Switch Company. (See Johnston, Edward H., assignor.)					
	Same.....(See Wharton, William, jr., assignor.)					
207, 328	Wharton, William, jr., assignor to Wharton Railroad Switch Company, Philadelphia, Pa. Railway-frog	Aug. 20, 1878	704	210	14	302
203, 684	Whealen, Charles, and Lewis Knerr, jr., Dayton, Ohio. Machinery for making paper boards	May 14, 1878	480	{ 136 137 }	13	803
203, 683	Wheat, Franklin H., Lowell, Mass. Spinning-ring	May 14, 1878	479	136	13	803
203, 681	Wheat, John J., Indianapolis, Ind. Salting and curing meats	May 14, 1878	478	136	13	802
203, 682	Same.....Preserving meats	May 14, 1878	478	136	13	802
202, 081	Wheatley, John W., assignor to self and Sanford D. Embrey, Rappahannock Station, Va. Fertilizer-distributor	Apr. 2, 1878	222	64, 65	13	630
203, 097	Wheatley, Thomas J., Wilkesbarre, Pa. Blasting rocks	Apr. 30, 1878	1338	380	13	797
	Wheaton, Milton A. (See Vincent & Wheaton.)					
8, 430	Wheeler, Charles A., et al. (See Craig, George W., assignor.)					
8, 431	Wheeler, Charles E., Boston, Mass.; assignor to John Boyle, New York, N. Y. Process and apparatus for painting striped awnings in oil-cloths. (Reissue.)	Sept. 24, 1878	900	281	14	483
8, 218	Same.....Striped awning or tent cloth. (Reissue.)	Sept. 24, 1878	961	281	14	483
	Wheeler, Charles H., San Francisco, Cal., and J. A. Bazin, Canton, Mass., assignors, by mesne assignments, to E. & H. T. Anthony & Co. Stereoscope. (Reissue.)	May 7, 1878	309	88	13	863
	Wheeler & Co., Frank. (See Everitt, Percival, assignor.)					
201, 579	Wheeler, Cyrenous, jr., Auburn, N. Y. Harvester	Mar. 10, 1878	704	{ 242 243 }	13	543
	Wheeler, Earl A. (See Dalzell, Samuel M., assignor.)					
205, 594	Wheeler, Edwin Ruthven, Merrimac, Mass. Vehicle-spring brace	July 2, 1878	134	40	14	26
202, 907	Wheeler, Elonzo S. and Jonathan E., Westport, Conn. Button	Apr. 23, 1878	1146	329	13	767
204, 866	Same.....same	June 11, 1878	468	136	13	1077
	Wheeler, Francis T., et al. (See Gibson, Andrew P., assignor.)					
201, 074	Wheeler, George, New Springville, N. Y. Hammock-support	Mar. 5, 1878	252	79	13	453
	Wheeler, Henry N., et al. (See Betts, Lewis F., assignor.)					
	Same.....(See Swedberg, Carl Johan, assignor.)					
206, 757	Wheeler, James Madison, Fish's Eddy, N. Y. Rowlock	Aug. 6, 1878	90	32	14	219
	Wheeler, John E., et al., trustee. (See Loring, David B., assignor.) (Reissue.)					
199, 483	Wheeler, John E., Lynn, and David B. Loring, Boston, Mass. Horseshoe-nail machine	Jan. 22, 1878	791	232	13	148
201, 727	Wheeler, John E., and David B. Loring, Boston, Mass.; said Wheeler assignor to self, J. E. Russell, Leicester, Mass., and C. W. Russell, New York, N. Y., trustees. Machine for finishing horseshoe-nails	Mar. 26, 1878	952	292	13	571
204, 641	Wheeler, John E., Lynn, Mass. Car-axle box	June 4, 1878	216	60	13	1043
206, 203	Wheeler, John E., Lynn, and Martin V. B. Etheridge, Boston, Mass.; said Etheridge assignor to said Wheeler. Lasting-machine for boots and shoes	July 23, 1878	846	241	14	128
205, 456	Wheeler, John T., Detroit, Mich. Gas-meter prover	June 25, 1878	1103	327	13	1170
	Wheeler, Jonathan E. (See Wheeler, Elonzo S. and Jonathan E.)					
203, 685	Wheeler, Marshal, assignor of one-third interest to Thomas C. Chittenden and John C. Armstrong, Watertown, N. Y. Rotary water-meter	May 14, 1878	483	137	13	803
	Wheeler, Melick & Co. (See Melick, James H., assignor.) (Reissue.)					
	Wheeler, Moses W., et al. (See Colbrook, Charles H., assignor.)					
201, 639	Wheeler, Nathaniel, Bridgeport, Conn. Refrigerator	Mar. 26, 1878	872	265	13	559
203, 304	Same.....Compound for filling the grain of wood	May 7, 1878	76	.....	13	830
	Wheeler, Norton. (See Patterson & Wheeler.)					
203, 515	Wheeler, Richmond W., Bushnell, Ill. Machine for cutting spherical bodies	May 7, 1878	290	83	13	861
208, 872	Wheeler, William A., Indianapolis, Ind. Seaming-machine	Oct. 8, 1878	452	{ 130 131 }	14	556

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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210, 382	Wheeler, William A., Indianapolis, Ind. Sheet-metal-ream-bending machine	Nov. 26, 1878	948	276	14	818
203, 096	Wheeler, William Lewis, assignor to self and William Noel, Birmingham, Ill. Thill-coupling	Apr. 30, 1878	1338	389	13	797
190, 338	Wheeler, Willit C., Oshkosh, Wis. Saw-set	Jan. 15, 1878	641	187	13	116
	Wheeler & Wilson Manufacturing Company. (See Beers, Philo M., assignor.)					
	Same.....(See Boynton, Edward Stanley, assignor.)					
	Same.....(See Dimond, George H., assignor.)					
	Same.....(See Stewart, Aurelius, assignor.)					
205, 021	Wheelock, Rufus W., et al. (See Starkey, Dexter, assignor.)					
	Whightsil, Philip, assignor to self and Edward Harris, Pickerington, Ohio. Nipping and clinching tool	June 18, 1878	642	189	13	1104
209, 844	Whiley, Frederick C., Lancaster, Ohio. Animal-poke	Nov. 12, 1878	341	102	14	730
204, 643	Whipple, Charles S., New London, Conn., assignor to Goddard Manufacturing Company. Door-check	June 4, 1878	219	70	13	1043
210, 442	Whipple, Clarence F., Racine, Wis. Wagon-brake	Dec. 3, 1878	54	13	14	831
204, 405	Whipple, Henry J. P., West Meriden, Conn. Toy pistol	May 28, 1878	1272	363	13	1004
205, 595	Whipple, Joel N., Volga City, Iowa. Vehicle running-gear	July 2, 1878	134	41	14	26
	Whipple, S. M. (See Ambler, Augustin I. and William R., assignors.)					
208, 778	Whitaker, Edgar A., Pawtucket, assignor of one-half interest to Sarah A. Beaman, Providence, R. I. Car-starter	Oct. 8, 1878	345	99	14	542
	Whitaker, Elmathan, et al. (See Franklin, Henry L., assignor.)					
200, 010	Whitaker, George Emerson, Hudson, Mass. Wagon-top	Feb. 5, 1878	113	37	13	251
	Whitall, James, et al. (See Atwater, Richard M., assignor.)					
209, 533	Whitbeck, Isaac, Potter, N. Y. Desk	Oct. 29, 1878	1187	345	14	670
199, 129	Whitburn, Thomas, Guilford, England. Ornamenting wood	Jan. 8, 1878	420		13	81
202, 687	Whitcher, Francis J. and G. Albert, Hyde Park, Mass. Gelatine lantern	Apr. 23, 1878	914	261	13	738
	Whitcher, G. Albert. (See Whitcher, Francis J. and G. Albert.)					
	Whitcomb, James. (See Eddy, David, assignor.)					
8, 389	Whitcomb, James O., assignor to Samuel S. White, Philadelphia, Pa. Dental operating-chair	Aug. 27, 1878	1005	{ 293 } { 294 }	14	344
204, 510	Whitcomb, Marcene Hamilton, and John Bliss, Holyoke, Mass. Stripping attachment to carding-machines	July 30, 1878	1207	347	14	177
202, 498	Whitcomb, Perry W., Washington, D. C. Stocking drier and stretcher	Apr. 16, 1878	678	199	13	703
204, 511	Whitcomb, William E., Barre, Vt. Plow	July 30, 1878	1208	347	14	177
	White, Archibald W., et al. (See Redmond, Charles C., assignor.)					
202, 128	White, Archibald W., San José, Cal. Pump-valve	Apr. 9, 1878	290	85	13	644
	White, Arthur Melville. (See King & White.)					
207, 634	White, Arthur W. (See Cummings, Uriah, assignor.)					
205, 597	White, Benjamin R., Trenton, N. J. Latch	Sept. 3, 1878	49	15	14	355
8, 484	White, Charles Henry, Danbury, assignor to self and George A. Shepard, Bethel, Conn. Block for forming hat-brims	July 2, 1878	136	41	14	27
204, 055	White, Charles W., Boston, Mass., assignor of part interest to Gayton P. Loring and Dennison W. B. Jackson. Eyelet for securing buckles to straps	Nov. 12, 1878	451	137	14	745
	White, Charles W., assignor of two-thirds interest to Gayton P. Loring and Dennison W. B. Jackson, Boston, Mass. Eyelet for securing buckles to straps	July 16, 1878	680	191	14	101
207, 466	White, David S., Tolono, Ill. Folding chair	Aug. 27, 1878	805	255	14	327
205, 819	White, Elbert, Stamford, Conn. Chain-pump bucket	July 9, 1878	402	115	14	63
	White, F. C. (See Hale, George C., assignor.)					
210, 229	White, George F., Frankford, Philadelphia, Pa. Method of manufacturing articles of wood	Nov. 26, 1878	774	230	14	795
201, 728	White, George M., New Haven, Conn. Combined bed and life-raft	Mar. 26, 1878	954	292	13	571
207, 635	White, Hawley C., North Bennington, Vt. Bending wood	Sept. 3, 1878	51	16	14	355
	White, Henry K. (See Knight, Samuel, assignor.)					
203, 228	White, Henry K., assignor to Wilcox & White Organ Company, West Meriden, Conn. Organ-reed	Apr. 30, 1878	1478	433	13	815
204, 930	White, Hiram J., Boston, Mass. Mustard pot and spoon	June 18, 1878	557	102	13	1092
8, 263	White, Hugh, Chicago, Ill., assignor of two-thirds interest to C. H. Fargo & Co. Shoe-tip	May 28, 1878	1298	369	13	1007
205, 022	White, James E., Cincinnati, Ohio. Fare-box	June 18, 1878	642	189	13	1104
205, 160	White, James H., assignor to Wilcox & White Organ Company, West Meriden, Conn. Blow-pedal for organs	June 18, 1878	784	232	13	1123
209, 636	White, James H., assignor to Manhattan Brass Company, New York, N. Y. Reflector for lamps	Nov. 5, 1878	111	33	14	696
200, 367	White, J. Atwood, assignor to A. Furman Blair, Philadelphia, Pa. Wire guide for paper-machines	Feb. 12, 1878	492	144	13	316
210, 383	White, J. Atwood, assignor of one-half interest to Samuel B. Dorlan, Waynesburg, Pa. Pipe-tongs	Nov. 26, 1878	949	276	14	818
	White, John, et al. (See Cummings, Samuel M., assignor.) (Reissue.)					
207, 785	White, John A. (See Gordon, Edward F., assignor.)					
	White, John E., assignor to Peters Leather Dash Company, Columbus, Ohio. Apparatus for manufacture of dashes	Sept. 3, 1878	204	63	14	374
210, 384	White, John H., Huntsville, Ala. Match-splint	Nov. 26, 1878	949	277	14	818
201, 373	White, John T., Arlington, assignor of one-half interest to Rufus S. Merrill, Boston, Mass. Key-fastener	Mar. 19, 1878	583	179	13	514
206, 375	White, Joseph C., New York, N. Y. Bobbin-winder for sewing-machines	July 23, 1878	1045	300	14	152
200, 677	White, Joseph J., Smithville, N. J. Chain-making machine	Feb. 26, 1878	827	{ 243 } { 244 }	13	382
204, 929	White, Joseph J., assignor to H. B. Smith Machine Company, Smithville, N. J. Belt-shifting pulley	June 18, 1878	557	162	12	1092
210, 282	White, Joseph P., Savannah, Ga. Spade attachment for fire-arms	Nov. 26, 1878	831	245	14	802
	White, Joseph R. (See Gladwell & White.)					
204, 939	White, Nelson J., Lawrence, Mass. Exhaust-nozzle	Oct. 15, 1878	533	156	14	571
209, 595	White, Orrin De Witt, Clinton, Iowa. Lock	Nov. 5, 1878	61	18	14	689
202, 685	White, Orasmus A., Norwalk, Ohio. Camp-bed	Apr. 23, 1878	912	261	13	738
8, 380	White, Otis C., Hopkinton, Mass., and Austin T. Ashmead, Hartford, Conn., assignor to Samuel S. White, Philadelphia, Pa. Dentist's chair	Aug. 20, 1878	717	214	14	308
202, 316	White, Peter, and John C. Kupferle, Saint Louis, Mo. Hydrant	Apr. 9, 1878	464	142	13	671
209, 313	White, Richard, Hartford, Conn. Curtain-fixture	Oct. 22, 1878	942	275	14	631
204, 692	White, Robert B., Chetopah, Kans. Rope-holding device	June 11, 1878	277	86	13	1055
291, 835	White, Rollin, Lowell, Mass. Charging magazine for revolvers	Mar. 26, 1878	1082	329	13	590
292, 613	Same.....(Charging-magazine and holster for revolvers)	Apr. 16, 1878	815	236	13	718
	White, Samuel C., et al. (See Merriam, George P., assignor.)					
208, 551	White, Samuel F., Peckville, Pa. Stove-lid	Oct. 1, 1878	93	28	14	501
204, 910	White, Samuel M., and John A. Francis, Salem, Va. Plow-point	Aug. 13, 1878	280	85	14	244
	White, Samuel S. (See Atkinson, William H., assignor.)					

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	White, Samuel S. (See Bramble & Deihl, assignors)..... (Reissue.)					
	Same..... (See Gilbert, John W., assignor.)					
	Same..... (See How, Woodbury Stowe, assignor.)					
	Same..... (See Poor, Chandler, assignor)..... (Reissue.)					
	Same..... (See Reynolds, William M., assignor)..... (Reissue.)					
	Same..... (See Starr, Eli T., assignor.)					
	Same..... (See Tripp, Henry C., assignor.)					
	Same..... (See Whitcomb, James O., assignor)..... (Reissue.)					
	Same..... (See White & Ashmead, assignors)..... (Reissue.)					
	Same..... (See Williams, John A. B., assignor)..... (Reissue.)					
202, 497	White, Samuel S., Philadelphia, Pa. Electro-magnetic dental engine.....	Apr. 16, 1878	677	198	13	703
205, 224	White, Silas W., Pensacola, Fla. Baker and roaster.....	June 25, 1878	865	256	13	1138
	White, S. S. (See Bonwill, William G. A., assignor.)					
	Same..... (See Hartman, Alexander, assignor)..... (Reissue.)					
210, 651	White, Stephen J., Belleville, Ontario, Canada. Whiffletree.....	Dec. 10, 1878	297	81	14	871
204, 406	White, Thomas, Quincy, Ill., assignor of one-half interest to Daniel E. Paris, Troy, N. Y. Stove-damper.....	May 28, 1878	1273	363	13	1004
202, 129	White, William H., Barre, Mass. Milk-cooler.....	Apr. 9, 1878	291	85	13	644
200, 592	White, William M., Milford, Mich. Hand-rake.....	Feb. 19, 1878	719	211	13	359
202, 686	White, William R., Neoga, Ill. Fence.....	Apr. 23, 1878	914	261	13	738
203, 971	Whiteford, David, Chicago, Ill. Lamp.....	May 21, 1878	795	228	13	940
208, 052	Whitehead, Edward, Cincinnati, Ohio. Cradle.....	Sept. 17, 1878	516	154	14	423
200, 957	Whitehead, Jessup, Central City, Colo. Dough-raiser.....	Mar. 5, 1878	132	43	13	436
200, 958	Same..... Cake-cutter.....	Mar. 5, 1878	133	44	13	436
208, 353	Whitehead, William Edward, Miles Platin, England, and Abel T. Atherton, Lowell, Mass. Cotton opener and lapper.....	Sept. 24, 1878	845	246	14	468
	Whitehead, William H. (See Stanton, William, assignor)..... (Reissue.)					
199, 766	Whitehouse, William T., Boston, Mass. Pocket-knife.....	Jan. 29, 1878	1102	324	13	204
199, 130	Whitelaw, John, Cleveland, Ohio. Game-counter.....	Jan. 8, 1878	422	124	13	81
	Whiteley, Joseph. (See Weiland, Benjamin, assignor.)					
205, 935	Whiteley, William Meredith, Joplin, Mo. Pump.....	July 9, 1878	523	149	14	79
201, 969	Whiteman, Louis P., New York, N. Y. Jar for preserves and fruits.....	Apr. 2, 1878	105	31	13	614
206, 284	Whiteside, Addison Hays and Milton Stewart, Onarga, Ill. Harrow.....	July 23, 1878	937	265	14	140
	Whiteside, Milton Stewart. (See Whiteside, Addison Hays and Milton Stewart.)					
210, 589	Whitfield, Thomas, Chicago, Ill. Apparatus for filling and capping capsules.....	Dec. 3, 1878	219	58	14	852
203, 686	Whitford, William, Kendallville, Ind. Nut-lock.....	May 14, 1878	484	137	13	893
211, 072	Whitham, William C., and Charles C. Schneider, Belmont, Wis. Stock-car.....	Dec. 17, 1878	788	216	14	940
	Whitin, Arthur F. (See Trowbridge, Charles E., assignor.)					
	Whitin, Charles E., trustee. (See Nagle, Augustus F., assignor.)					
205, 596	Whiting, Albert, and Joseph Alexander Smith, Rochester, N. Y. Machine for raising leather from tan-vats.....	July 2, 1878	135	41	14	26
201, 076	Whiting, Andrew F., Norwich, Conn. Seal-lock.....	Mar. 5, 1878	254	80	13	453
205, 036	Whiting, Ebenezer G., Racine, Wis. Sled-knee.....	July 9, 1878	524	149	14	79
204, 931	Whiting, Edwin B., and Frederick E. Daum, Orange, N. J. Hat-pouncing machine.....	June 18, 1878	558	162	13	1992
	Whiting, E. H. (See Whiting, James M., assignor.)					
204, 642	Whiting, Enoch B., Saint Albans, Vt. Brush-machine.....	June 4, 1878	218	69	13	1043
203, 806	Whiting, George T., New York, N. Y. Edge for upholstered surfaces.....	May 14, 1878	613	171	13	909
200, 884	Whiting, James M., assignor of one-half interest to E. H. Whiting, Providence, R. I. Car wheel and axle.....	Mar. 5, 1878	69		13	426
202, 208	Whiting, James M., assignor of one-half interest to Julius Carroll, Providence, R. I. Vehicle-hub.....	Apr. 9, 1878	371	109	13	655
	Whiting, John Chester. (See Babcock, Whiting & Chamberlain.)					
207, 786	Whiting, John L., Boston, Mass. Art of making brushes.....	Sept. 3, 1878	206	63	14	375
209, 594	Whiting, William H. H., Chelsea, Mass. Electric gas-lighting apparatus.....	Nov. 5, 1878	60	18	14	689
202, 614	Whiting, William S., Oxford, assignor to Carlos French, Seymour, Conn. Machine for reducing and pointing wire.....	Apr. 16, 1878	818	236	13	718
	Whitlock, Daniel. (See Hogan & Whitlock.)					
	Whitman & Burrell. (See Smith, Freeman & Burrell, assignors.)					
	Whitman, Henry. (See Ingalls, William Allen, assignor.)					
190, 131	Whitman, Josiah A., Providence, R. I. Pump.....	Jan. 8, 1878	422	124	13	81
	Whitman, M. I., et al. (See Whitman, William G., assignor.)					
207, 467	Whitman, Royal E., Springfield, Mass. Combined bridle and halter.....	Aug. 27, 1878	866	256	14	327
202, 320	Whitman, William G., assignor of part interest to John A. Lomax and M. I. Whitman, Chicago, Ill. Bottle-stopper.....	Apr. 9, 1878	490	143	13	672
205, 712	Whitmarsh, John W., Galesburg, Ill. Nut-lock.....	July 2, 1878	263	79	14	42
209, 001	Whitney, Arthur E., Winchester, Mass. Leather-splitting machine.....	Oct. 15, 1878	599	174	14	580
204, 269	Whitney, Augustus L., Waltham, assignor to self and Thomas H. Hussey, Lowell, Mass. Check-rein guide.....	May 28, 1878	1132	324	13	987
8, 097	Whitney, Bennet, Rahway, N. J., assignor to William L. Teter. Grinding-mill. (Reissue.)	Feb. 19, 1878	738	216	13	362
8, 098	Whitney, Bennet, Rahway, N. J. Grinding-mill..... (Reissue.)	Feb. 19, 1878	739	216	13	362
199, 386	Whitney, B. Dexter, Gardiner, Me. Saw-mill head-block.....	Jan. 22, 1878	699	205	13	133
199, 387	Same..... Saw-mill dog.....	Jan. 22, 1878	700	205	13	133
205, 323	Whitney Carriage Company, F. A. (See Whitney, Francis W., assignor)..... (Reissue.)					
	Whitney, Charles, Saint Louis, Mo., assignor to C. W. and W. W. Marsh, Sycamore, Ill. Harvester.....	June 25, 1878	971	288	13	1152
200, 591	Whitney, Daniel D., Beverly, N. J. Thill-coupling.....	Feb. 19, 1878	718	211	13	359
200, 114	Whitney, Edwin R., Magog, Quebec, Canada. Harvester cutter-bar.....	Feb. 5, 1878	226	69	13	267
206, 846	Whitney, Edwin R., Magog, assignor of one-half interest to Angus McKay and Charles Lucien Bossé, Montreal, Canada. Grain-binder.....	Aug. 6, 1878	195	62, 63	14	230
8, 327	Whitney, Francis W., Leominster, Mass., assignor to F. A. Whitney Carriage Company. Reversible handle for children's carriages..... (Reissue.)	July 9, 1878	538	153	14	81
209, 097	Whitney, Francis W., Leominster, Mass. Standard for carriage-tops.....	Oct. 15, 1878	711	206	14	595
199, 674	Whitney, George A., La Grange, Ohio. Harvester-knife attachment for grindstones.....	Jan. 29, 1878	1020	297	13	191
199, 767	Whitney, George E., Winchester, assignor to L. O. Robertson, trustee, Boston, Mass. Manufacture of horseshoe-nails.....	Jan. 29, 1878	1103	324	13	204
	Whitney, I. W. G., et al. (See McLean, Alexander, assignor.)					
209, 534	Whitney, James A., New York, N. Y. Refrigerator.....	Oct. 29, 1878	1188	345	14	670
210, 979	Whitney, James A., New York, N. Y. Refrigerating apparatus.....	Dec. 17, 1878	670	185	14	927
200, 678	Whitney, James F., Hartford, Conn. Check-valve.....	Feb. 26, 1878	829	244	13	384
201, 900	Whitney, Lafayette, Delaware County, Ind. Rotary churn.....	Apr. 2, 1878	41	11	13	605
8, 079	Whitney, Ruel W., New York, N. Y., assignor to Wilson Sewing Machine Company, Chicago, Ill. Lock for drawers..... (Reissue.)	Feb. 12, 1878	497	146	13	317



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No.	Name, residence, and invention.	Date.	Mon'thly volume.		Official Gazette.	
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8,348	Whitney, Thomas J. ( <i>See</i> Hall & Whitney.)					
8,517	Whitney, William F., assignor of one-half interest to Edward Storm, Poughkeepsie, N. Y. Vehicle-spring	July 23, 1878	1066	306	14	156
210,385	Same..... same..... same..... (Reissue.)	Dec. 10, 1878	481	136	14	896
198,865	Whitney, William F., Poughkeepsie, N. Y. Coupling for vehicle-springs	Nov. 26, 1878	950	277	14	818
206,376	Whitnum, Samuel, Green Point, N. Y. Commode	Jan. 1, 1878	145	41	13	31
210,732	Same..... Toy money-box	July 23, 1878	1047	301	14	153
203,571	Same..... Fire-shovel	Dec. 10, 1878	378	103	14	881
202,616	Whiton, David E., West Stafford, Conn. Drill and lathe chuck attachments	May 14, 1878	373	105	13	879
	Whittaker, David, assignor of one-half interest to Mary C. Whittaker, Milwaukee, Wis. Clothes-sprinkler	Apr. 16, 1878	820	237	13	718
203,395	Whittaker, George. ( <i>See</i> Mudge & Whittaker.)					
	Whittaker, John, Green Point, N. Y. Apparatus for engraving glass by means of a sand-blast	May 7, 1878	168	48	13	843
206,283	Whittaker, Mary C. ( <i>See</i> Whittaker, David, assignor.)					
207,925	Whittemore, Amos, Cambridgeport, Mass. Elevator	July 23, 1878	936	265	14	140
209,784	Same..... Peg-float	Sept. 10, 1878	368	112	14	399
	Same..... same	Nov. 12, 1878	276	82	14	722
	Whittemore, David. ( <i>See</i> Cortwell, Samuel N., assignor.)					
	Same..... ( <i>See</i> Hinds, Franklin P., assignor.)					
	Same..... ( <i>See</i> Leavitt, Albert, assignor.)					
	Whittemore, G. W. ( <i>See</i> Halvorson, Halvor, assignor.)					
201,970	Whittemore, Harrison. ( <i>See</i> Johnson & Whittemore.)					
202,082	Whittemore, James M., Bridesburg, Pa. Breech-loading fire-arm	Apr. 2, 1878	106	31, 32	13	614
205,711	Whittemore, Samuel E., Bristol, R. I. Rubber boot and shoe	Apr. 2, 1878	223	65	13	630
205,324	Same..... same	July 2, 1878	264	79	14	42
209,637	Whittier, John W., Syracuse, N. Y. Car-axle	June 25, 1878	975	288	13	1153
210,652	Same..... Coin-holder	Nov. 5, 1878	112	33	14	696
204,644	Whittier, Cullen K., Boston, Mass. Meat-tenderer	Dec. 10, 1878	298	81	14	871
201,901	Whittier, Joseph G., Attica, Ind. Metallic shank-stiffener for boots and shoes	June 4, 1878	219	70	13	1043
199,768	Whittier, Stephen T., East Corinth, Me. Odometre	Apr. 2, 1878	43	11	13	005
210,283	Whittier, William H., Fremont, Nebr. Feed-cooker	Jan. 29, 1878	1105	324	13	204
201,075	Same..... Fence-post	Nov. 26, 1878	833	245	14	803
202,615	Whittlesley, George Dickinson, New London, Conn. Printer's quoin	Mar. 5, 1878	253	80	13	453
	Whittlesley, William H., and Charles T. Noble, Russell, Iowa. Wheel-plow	Apr. 16, 1878	819	237	13	718
199,388	Whitwell, Thomas, South Stockton, England. Apparatus for heating air and gases	Jan. 22, 1878	701	{ 205 206 207 }	13	133
	Whitworth, William, <i>et al.</i> ( <i>See</i> Colbrook, Charles H., assignor.)					
208,779	Whyland, Charles. ( <i>See</i> Hall, George B., assignor.)					
209,845	Whyler, Edward M., assignor to Henry Krueger, Hays City, Kans. Liquid-measure	Oct. 8, 1878	346	99	14	542
	Whysall, Job, jr., and Charles M. Merrick, New Brighton, Pa. Machine for the manufacture of horseshoe-nails	Nov. 12, 1878	342	{ 102 103 }	14	730
204,517	Wiard, Edward, and George C. Avery, assignors to B. F. Avery & Sons, Louisville, Ky. Sulky-plow	June 4, 1878	90	30, 31	13	1025
206,285	Wickersham, David, and Thomas Benton Brown, Fairfield, assignors to selves and Allen B. Cope, New Waterford, Ohio. Machine for making basket-splints	July 23, 1878	938	265	14	140
200,418	Wickersham, Henry N. ( <i>See</i> Huston & Wickersham.)					
	Wickham, Horace, jr., Waukegan, assignor of one-half interest to H. P. Caldwell, Chicago, Ill. Hand branding-stamp	Feb. 19, 1878	548	162	13	333
	Wicks, William A., <i>et al.</i> ( <i>See</i> Brooks, George D., assignor.)					
	Wickstead, Edwin. ( <i>See</i> Chandler, Wickstead & Van Voorhis.)					
203,572	Widmer, Jacob, New Hartford, Conn. Shuttle-motion for looms	May 14, 1878	374	{ 105 106 }	13	880
	Widney, Charles W. ( <i>See</i> Kummerer & Widney.)					
210,175	Wieder, Reuben M., Carthage, Ill. Washing-machine	Nov. 19, 1878	702	209	14	782
	Wiegman, Frederick. ( <i>See</i> Fulmer & Wiegman.)					
201,077	Wiel, Asher, Baltimore, Md. Postal-card file	Mar. 5, 1878	255	80	13	453
202,770	Wierman, Nicholas A., Bendersville, Pa. Knife-scourer	Apr. 23, 1878	997	287	13	749
201,141	Wiesebeck, Frederick W., Brooklyn, N. Y. Effervescent liquid-drawing apparatus	Mar. 12, 1878	327	100	13	471
	Same..... Glass-lined fountain	Mar. 12, 1878	329	{ 100 101 }	13	471
201,212	Same..... Apparatus for drawing effervescent liquids	Mar. 12, 1878	393	121	13	481
202,389	Same..... Liquid-cooler	Apr. 16, 1878	574	168	13	688
210,071	Wiesedeppe, Simon Herman, Seneca, Kans. Animal-trap	Nov. 19, 1878	594	177	14	167
206,158	Wiesinger, Hans, and Ludwig Rissmüller, Göttingen, Germany. Treating rags for obtaining paper stock and fertilizers	July 16, 1878	775	.....	14	115
209,205	Wiester, William H., San Francisco, Cal. Egg-beater	Oct. 22, 1878	841	242	14	617
200,959	Wieting, Archibald, assignor of one-half interest to A. Walrath, Fort Plain, N. Y. Nut	Mar. 5, 1878	134	44	13	436
	Wiggen, Joseph H. ( <i>See</i> Sterick, Sylvester T. F., assignor.)					
206,911	Wiggerman, John Barney and William H., Millhausen, Ind. Coffe-roaster	Aug. 13, 1878	280	85	14	244
	Wiggerman, William Herman. ( <i>See</i> Wiggerman, John Barney and William H.)					
205,776	Wiggers, Henry H., and John F. Wesseler, assignors to Kearney & Wiggers, Cincinnati, Ohio. Locking device for cradles	July 9, 1878	352	101	14	57
210,176	Wiggins, George W., Cuthbert, Ga. Plow	Nov. 19, 1878	702	209	14	782
211,073	Wiggins, Jefferson G., Seneca Falls, N. Y. Can-opener	Dec. 17, 1878	789	217	14	940
202,971	Wigington, Henry T., Auxvasse, Mo. Animal-trap	Apr. 30, 1878	1222	353	13	782
	Wight, Charles H. ( <i>See</i> Wight, Henry, assignor.)					
8,347	Wight, George R. ( <i>See</i> Overbaugh, Abraham W., assignor.) (Reissue.)					
206,377	Wight, George R., New York, N. Y. Mucilage-bottle	July 23, 1878	1066	305	14	155
	Wight, Henry, Natick, Mass., assignor to Charles H. Wight, Brooklyn, N. Y. Manufacture of boots and shoes	July 23, 1878	1047	301	14	153
205,225	Wight, Hiram C., Worcester, Mass. Caliper	June 25, 1878	866	256	13	1139
201,316	Wight, Peter B., Chicago, Ill., assignor of one-half interest to Harvey B. Merrell, Morristown, N. J. Draw-bridge gate	Mar. 12, 1878	513	157	13	497
202,617	Wight, Peter B., Chicago, Ill., assignor of one-half interest to Harvey B. Merrell, Morristown, N. J., and Thomas Ferguson, Detroit, Mich. Fire-proof ceiling	Apr. 16, 1878	821	237	13	718
203,072	Same..... Fire-proof column	May 21, 1878	798	229	13	940
204,867	Wight, Peter B., Chicago, Ill., assignor of one-half interest to Harvey B. Merrell and Thomas Ferguson, Detroit, Mich. Fire-proof column	June 11, 1878	469	136	13	1077
	Wight, Richard R. ( <i>See</i> Reznor, George, assignor.)					
	Wikidal, William A., <i>et al.</i> ( <i>See</i> Gibbs, Lewis, assignor.)					
203,305	Wilber, Allen, assignor to self and J. S. Huffman, Belknap, Iowa. Corn-planter	May 7, 1878	76	23	13	830
206,378	Wilber, Francis A., Central College, Ohio. School-desk	July 23, 1878	1048	301	14	153

*Alphabetical list of patentees for the year 1878—Continued.*

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209, 997	Wilbur, Henry A., Somerville, assignor to Benjamin D. Washburn, Boston, Mass. Pulley for window-sashes.	Nov. 10, 1878	513	155	14	757
199, 244	Wilcox, Albert. (See Crocker & Wilcox.)					
	Wilcox, Charles K., Lima, Ohio. Vehicle-wheel hub	Jan. 15, 1878	543	160	13	101
206, 512	Wilcox, Daniel S. (See Chapman, Samuel J., assignor.)					
207, 579	Wilcox, Elbert F., Hoopston, Ill. Sawing-machine.	July 30, 1878	1210	347	14	177
204, 933	Wilcox, Gordon H., Washington, D. C. Mirror attachment.	Aug. 27, 1878	998	292	14	343
8, 370	Wilcox, Harvey. (See Russell, John A., assignor.)					
	Wilcox, James A., Rocky Hill, Conn. Cow-fetter	June 18, 1878	550	163	13	1093
	Wilcox, Joseph S., deceased, Daniel B. Greene, administrator and assignor, by mesne assignments, to Lewis M. and Moses Rumsey, Saint Louis, Mo. Chain-pump bucket. (Reissue)	Aug. 13, 1878	461	140	14	267
202, 618	Wilcox, Nathan O., et al. (See Cushman, Henry T., assignor.)					
	Wilcox Silver Plate Company. (See Rabbitt, S. William, assignor.)					
	Wilcox & White Organ Company. (See White, Henry K., assignor.)					
	Same. (See White, James H., assignor.)					
	Wild, Frederic W., Baltimore, Md., assignor to Domestic Sewing Machine Company. Hand-reamer	Apr. 16, 1878	822	237	13	718
203, 687	Wildbore, Joseph E., Brooklyn, N. Y. Fire-escape	May 14, 1878	485	137	13	893
205, 161	Wilde, Robert. (See Schofield & Wilde.)					
	Wilder, Charles O., Racine, Wis., assignor of one-half interest to Weir Plow Company, Monmouth, Ill. Vehicle-wheel	June 18, 1878	785	233	13	1123
200, 781	Wilder, Ezra, South Hingham, Mass. Device for driving horses	Feb. 26, 1878	929	273	13	399
206, 990	Wilder, Rufus A., Cressona, Pa. Transporting petroleum-oil	Aug. 13, 1878	350	108	14	253
207, 231	Same. same	Aug. 20, 1878	608	183	14	289
206, 286	Wilder, William Henry, and Charles Wright Conant, Gardner, Mass. Car-brake	July 23, 1878	939	266	14	140
210, 479	Wildermuth, La Fayette, New Lexington, Ohio. Bed-spring	Dec. 3, 1878	91	23	14	836
	Wilde, E. B. (See Hodges, Addison S., assignor.)					
	Wildey, James E. (See Lindsay, John P., assignor.)					
204, 270	Wiles, George W., assignor to self and J. M. Wylie, Vincennes, Iowa. Post-office apparatus	May 28, 1878	1133	324	13	967
200, 011	Wiles, Thomas S., Albany, N. Y. Ironing-machine	Feb. 5, 1878	113	38	13	251
200, 419	Same. same	Feb. 19, 1878	549	162	13	333
205, 325	Wiley, Alexander, Bluff Point, Ind. Ditching-plow	June 25, 1878	976	289	13	1153
	Wiley, Charles D. (See Reynolds & Wiley.)					
	Wiley, John A., et al. (See Baldwin, Eben A., assignor.)					
	Wiley, John A. (See Belue, Jacob Franklin, assignor.)					
	Wiley, John A., et al. (See Davis, Hilar D., assignor.)					
202, 974	Wiley, Robert S., Blountsville, Tenn. Stirrup	Apr. 30, 1878	1225	354	13	782
	Wiley, William B. (See Amwake, William F. H., assignor.)					
203, 862	Wilhelm, John H., Denver, Colo. Paring-knife	May 21, 1878	681	193	13	925
204, 645	Wilkinson, Basil M., Baltimore, Md. Motor-cable for dental engines	June 4, 1878	220	70	13	1043
205, 162	Same. Sled	June 18, 1878	788	233	13	1123
205, 938	Same. Dentist's cabinet	July 9, 1878	525	150	14	79
207, 699	Same. Dental plate	Sept. 3, 1878	113	34	14	263
204, 868	Wilkes, George, Monroe, Iowa. Running-gear for vehicles	June 11, 1878	469	136	13	1077
202, 910	Wilkins, Joseph, Baltimore, Md. Treatment of waste from the separation of animal from vegetable fibers	Apr. 23, 1878	1148		13	768
203, 230	Same. Separating animal from vegetable fiber	Apr. 30, 1878	1480	433	13	815
203, 231	Same. same	Apr. 30, 1878	1480		13	815
202, 391	Wilkins, William F., assignor of one-fourth interest to James T. Sawyer, Montreal, Quebec, Canada. Washing-machine	Apr. 16, 1878	576	169	13	688
208, 656	Wilkinson, Asa W., New York, assignor to self and Edward S. T. Kennedy. Treating gas-lime to produce caustic lime	Oct. 1, 1878	207		14	517
198, 828	Wilkinson, John M., Phoenixville, Pa. Scrubbing-brush	Jan. 1, 1878	107	30	13	25
201, 898	Wilkinson, Lewis, Brooklyn, N. Y. Atomizer	Apr. 2, 1878	89	11	13	694
199, 339	Wilkinson, Robert R., Jamestown, Mich. Egg-carrier	Jan. 15, 1878	642	188	13	116
204, 934	Same. same	June 18, 1878	560	163	13	1093
209, 437	Wilkinson, William K., Cusseta, Ga. Bee-hive	Oct. 29, 1878	1083	315	14	655
202, 317	Will, John, Long Point, Ill. Washing-machine	Apr. 9, 1878	486	142	13	672
206, 287	Will, John, Bryan, Ohio. Lunch-case	July 23, 1878	940	266	14	140
201, 581	Will, Nicolaus, Brooklyn, N. Y. Gas-burning furnace	Mar. 19, 1878	799	243	13	544
204, 869	Willard, Hosea, assignor to self and Frederick W. Coe, Vergennes, Vt. Weighing-scales	June 11, 1878	471	137	13	1077
201, 078	Willard, Joel G., New York, N. Y. Hydraulic elevator	Mar. 5, 1878	256	80	13	453
208, 573	Willard, William B., New York, N. Y. Shuttle motion for looms	Oct. 8, 1878	453	131	14	556
208, 552	Willbur, James M., New York, N. Y. Ventilating vault-light	Oct. 1, 1878	94	28	14	501
207, 926	Willcox, Fenn, Newark, N. J. Can for liquid	Sept. 10, 1878	369	112	14	399
	Willcox, J. E., et al. (See Willcox, William H., assignor.)					
203, 973	Willcox, William H., assignor to J. E. Willcox and J. N. Tilden, Peekskill, N. Y. Exercising-machine	May 21, 1878	799	229	13	941
	Willershausen, Siegfried. (See Rhoner & Willershausen.)					
200, 809	Willershausen, Siegfried, and Frank Rhoner, New York, N. Y. Rocking-chair	Feb. 26, 1878	957	282	13	493
207, 580	Willershausen, Siegfried, New York, N. Y. Rocking-chair	Aug. 27, 1878	999	292	14	343
199, 133	Willetts, Joseph H., New York, N. Y. Overalls	Jan. 8, 1878	425	124	13	82
	Willetts, James P., et al. (See Varns, Harvey B., assignor.)					
	Same. (See Welch, Rosia W., assignor.)					
210, 386	William, John D., Rising Sun, Ind. Fire and burglar alarm	Nov. 26, 1878	951	277	14	818
206, 654	Williams, Bascom, and Crawford C. Morgan, Flowery Branch, Ga. Plow	July 30, 1878	1358	390	14	195
204, 407	Williams, Benozette, Chicago, Ill. Self-adjusting bridge	May 28, 1878	1274	363 364	13	1094
	Williams, Benjamin F. (See Kinter & Williams.)					
207, 581	Williams, Benjamin I., Lansing, Mich. Churn	Aug. 27, 1878	1000	292	14	343
	Williams, Carmi H. (See Phillips & Williams.)					
	Williams, Charles D. (See Birge & Williams.)					
198, 959	Williams, Charles Monroe, Bethel, Ky. Can-opener	Jan. 8, 1878	249	71	13	54
209, 535	Same. same	Oct. 29, 1878	1189	345	14	670
206, 847	Williams, Cornelius S., Franklinton, N. C. Cotton-gin rib	Aug. 6, 1878	199	63	14	231
201, 472	Williams, Daniel, West Philadelphia, Pa. Funnel	Mar. 19, 1878	681	208	13	528
208, 354	Same. Carving-fork	Sept. 24, 1878	846	247	14	468
206, 514	Williams, David C., Newark, Ohio. Apparatus for obtaining and washing sand	July 30, 1878	1211	348	14	178
200, 368	Williams, Edwin, assignor to self and C. W. Lamphere, Norwich, N. Y. Valve-gear for steam-engines	Feb. 12, 1878	493	145	13	317
	Williams, Ellen M., et al. (See Williams, George W., assignor.)					
	Williams, Frank M. (See Harris & Williams.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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204, 178	Williams, George, Mystic Bridge, Conn. Car-axle-box slide.....	May 28, 1878	1038	295	13	975
199, 132	Williams, George F. (See Bancroft, George D., assignor.) Williams, George, Groton, assignor of one-half interest to H. C. Holmes, Stonington, Conn. Car-axle box.....	Jan. 8, 1878	424	124	13	81
201, 972	Williams, George L. (See Rundle, Henry, assignor.) Williams, George R., Dardanelle, Ark. Bale-weighing scales.....	Apr. 2, 1878	110	32	13	615
207, 927	Williams, George R., Ithaca, N. Y. Horse hay-rake.....	Sept. 10, 1878	369	{ 112 113 }	14	399
208, 504	Williams, George S., Eggleston's Springs, Va. Hog-cholera compound.....	Oct. 1, 1878	49	.....	14	496
208, 446	Williams, George W., et al. (See Skinner, Charles C., assignor.) Williams, George W., assignor to Herbert R. Gage and Ellen M. Williams, Boston, Mass. Kitchen-table.....	Sept. 24, 1878	943	277	14	480
208, 447	Williams, G. W., sr., et al. (See Murdock, Edwin R., assignor.) Williams, Henry A., Taunton, Mass. Machine for rolling taper shapes.....	Sept. 24, 1878	944	{ 277 278 }	14	481
200, 115	Williams, Henry M., Coldwater, Mich. Spindle and flier for spinning machinery.....	Feb. 5, 1878	227	69	13	268
199, 606	Williams, Henry S., Boston, Mass. Newspaper-file.....	Jan. 22, 1878	923	270	13	168
200, 679	Williams, Isaac O., et al. (See Slater, Benjamin, assignor.) Williams, Jacob S., Saint Louis, Mo. Water-motor.....	Feb. 26, 1878	830	344	13	384
8, 360	Williams, J. C., et al. (See Mullins, William, assignor.) Williams, John A. B., assignor to Samuel S. White, Philadelphia, Pa. Tool-holder. (Re-issue).....	Aug. 6, 1878	203	65	14	232
201, 580	Williams, John O., Toledo, Ohio. Artificial marble.....	Mar. 19, 1878	798	.....	13	544
206, 204	Williams, John S., Brooklyn, N. Y. Petroleum-stove.....	July 23, 1878	848	241	14	128
210, 387	Williams, John S., Chicago, Ill. Combined spading and seeding machine.....	Nov. 26, 1878	953	277	14	818
200, 095	Williams, Joseph, Tate Springs, Tenn. Fence.....	Oct. 15, 1878	709	205	14	585
208, 657	Williams, Julius C., assignor to self and S. B. Pritchard, Thomaston, Ga. Seed-planter and guano-distributor.....	Oct. 1, 1878	208	59	14	517
209, 998	Williams, Lewis, Bennington, Vt. Machine for making pail-balls.....	Nov. 19, 1878	514	{ 155 156 }	14	757
199, 769	Williams, Lucian A. (See Terrell & Williams.) Williams, Martin, Saint Johnsville, N. Y. Horse-power chain.....	Jan. 29, 1878	1106	324	13	205
200, 495	Williams, Morris D., Syracuse, N. Y. Ballot-box.....	Feb. 19, 1878	622	183	13	345
208, 940	Williams, Miles D., and Wallace H. Dodge, Mishawaka, Ind. Wagon-jack.....	Oct. 15, 1878	534	157	14	571
209, 002	Williams, Origen S., et al. (See Spalding, Orlando D., assignor.) Williams, R., jr., et al. (See Haigh, Benjamin F., assignor.) Williams, Richard S., New York, N. Y. Package for transmission of dental foil.....	Oct. 15, 1878	600	175	14	580
207, 145	Williams, Robert N., et al. (See Mansfield, William H., assignor.) Williams, Robert R. (See Davico, John P., assignor.) Williams, Robinson, et al. (See Taylor, Edmund B., assignor.) Williams, R. P., and Lewis Worsham, Alameda, Cal. Welding-copper.....	Aug. 20, 1878	520	.....	14	278
202, 620	Williams, Thomas, et al. (See Nicholson, Francis P., assignor.) Williams, Thomas O., and Wilbur F. Hubbell, Wauseon, Ohio. Gate.....	Apr. 16, 1878	823	238	13	719
211, 074	Williams, Thomas W., Swansea, Wales, Great Britain. Furnace.....	Dec. 17, 1878	790	217	14	941
208, 445	Williams, Timothy F., et al. (See Spalding, Orlando D., assignor.) Williams, William. (See Laufer, Simon D., assignor.) Williams, William, Huntingdon, Pa. Registering liquor-faucet.....	Sept. 24, 1878	942	{ 276 277 }	14	480
210, 887	Williams, William A., Memphis, Tenn. Fruit-box.....	Dec. 17, 1878	559	150	14	913
209, 740	Williams, William Ap, Cambria, Wis. Metallic pump-valve.....	Nov. 5, 1878	223	67	14	711
203, 863	Williams, William L., New York, N. Y. Wagon-spring.....	May 21, 1878	681	194	13	925
206, 513	Williams Brothers. (See Williamson, William C., assignor.) Williamson, Daniel, assignor to Daniel Beckley and Sybilla Williamson, Sunbury, Pa. Sewing-machine.....	July 30, 1878	1210	347	14	177
204, 870	Williamson, Rolly M., assignor of one-half interest to Henry Stevens, Chicago, Ill. Machine for making wooden boxes.....	June 11, 1878	471	137	13	1078
200, 157	Williamson, Robert B., Washington, D. C. Air-cooling apparatus.....	Feb. 12, 1878	277	83	13	284
190, 245	Williamson, Sybilla, et al. (See Williamson, Daniel, assignor.) Williamson, Thomas, and William A. Vogts, Long Island City, N. Y. Fire-kindling.....	Jan. 15, 1878	543	.....	13	101
203, 808	Williamson, William C., assignor to Williamson Brothers, Philadelphia, Pa. Hoisting-machine.....	May 14, 1878	614	171	13	909
205, 598	Willis, Ebenezer, Ayer, Mass. Cement.....	July 2, 1878	137	.....	14	27
207, 375	Willis, Henry M., Mineola, N. Y. Clevis-bolt.....	Aug. 27, 1878	768	229	14	315
209, 635	Willis, Henry M., assignor of one-half interest to Garry Vanderbeek, Mineola, N. Y. Lifting-jack.....	Nov. 5, 1878	110	32	14	696
200, 782	Willis, John M., Richmond, Ky. Pump.....	Feb. 26, 1878	930	273	13	399
201, 143	Willis, Walter N., Trappe, Md. Apparatus for converting motion.....	Mar. 12, 1878	330	101	13	471
200, 496	Willoughby, A. H., Lowell, Mass. Strainer for faucets and water-pipes.....	Feb. 19, 1878	623	183	13	345
209, 742	Willoughby, James D., Philadelphia, Pa. Hot-water heating apparatus.....	Nov. 5, 1878	224	68	14	711
210, 960	Willoughby, William M., Philadelphia, Pa. Bed-bottom.....	Dec. 17, 1878	673	185	14	927
203, 516	Willringhaus, Gustav, Newark, N. J. Handle for traveling-bags.....	May 7, 1878	292	83	13	861
202, 390	Wills, Benjamin T. (See Perkins, Miner Talor, assignor.) Wills, William W., Janesville, Wis. Vehicle-spring.....	Apr. 16, 1878	575	169	13	688
208, 131	Willson, Freeman R., jr., and William W., Columbus, Ohio. Vehicle-axle skein.....	Sept. 17, 1878	596	177	14	434
204, 118	Willson, Henry, Chicago, Ill. Cover for holding tablets.....	May 21, 1878	951	273	13	960
201, 582	Willson, J. M. (See Lecher, Samuel, assignor.) Willson, Osborn. (See Fahnstock & Powell, assignors.) Willson, William W. (See Willson, Freeman R., jr., and William W.) Willmot Manufacturing Company. (See Blackham, Eli J., assignor.)	Mar. 19, 1878	800	244	13	544
202, 083	Willmsmann, Wilhelm, Hagen, Prussia. Apparatus for manufacturing wire.....	Apr. 2, 1878	224	65	13	630
200, 810	Wilson, Richard, Toledo, Ohio. Machine for purifying and compressing air.....	Feb. 26, 1878	958	283	13	403
209, 506	Wilson, Bryce A., Providence, R. I. Door-plate.....	Nov. 5, 1878	62	18	14	689
201, 374	Wilson, Bryce A., Providence, R. I., assignor to Peter K. Wilson, New York, N. Y. Harness-rosette.....	Nov. 5, 1878	62	18	14	689
201, 374	Wilson, Charles C., et al. (See Crooks, Thomas R., assignor.) Wilson, Charles H., Chicago, Ill. Apparatus for neutralizing the effects of induced electrical currents.....	Mar. 19, 1878	583	180	13	514
200, 900	Wilson, C. P., et al. (See Boyd, Jesse C., assignor.) (Re-issue.) Wilson, Ebenezer, Otto, N. Y. Spring-back for vehicle-seats.....	Mar. 5, 1878	135	44	13	436
204, 777	Wilson, Elias L., assignor of one-third interest to William H. Kellogg, Chicago, Ill. Ironing-machine.....	June 11, 1878	370	111	13	1066
204, 119	Wilson, F. Cortez, Chicago, Ill. Jacket-can.....	May 21, 1878	952	273	13	960
202, 536	Wilson, F. Cortez, and Zudock H. Bools, assignors, by mesne assignments, to J. G. Evenden, Chicago, Ill. Oil-tank.....	Oct. 29, 1878	1191	346	14	670
190, 697	Wilson, Fitzland L., Mason, Mich. Wash-board.....	Jan. 22, 1878	924	271	13	168

*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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205, 937	Wilson, Francis Taylor, and George Washington Hall, Nevada, Iowa. Road-scraper ..	July 9, 1878	524	150	14	79
203, 397	Wilson, Frank W., Manchester, N. H. Retort-lifter ..	May 7, 1878	169	49	13	844
	Wilson, Freeman Patterson. (See Davis & Wilson.)					
201, 856	Wilson, Gardner Morse, Zaleski, Ohio. Wagon-brake ..	Mar. 26, 1878	1085	330	13	590
203, 807	Same.....Stirrup ..	May 14, 1878	613	171	13	909
206, 379	Wilson, George, Brooklyn, N. Y. Invalid-chair ..	July 23, 1878	1049	302	14	153
210, 733	Same.....Adjustable chair ..	Dec. 10, 1878	378	103	14	881
209, 741	Wilson, George C., Farmington, assignor to Riley H. Parker, Rochester, N. H. Machine for marking boot and shoe fronts ..	Nov. 5, 1878	223	67	14	711
201, 318	Wilson, George Frankling, Athens, Tenn. Fan attachment ..	Mar. 12, 1878	515	157	13	497
	Wilson, George H. (See Leimbach & Wilson.)					
201, 971	Wilson, Henry W., et al. (See Hanks, Oscar, assignor.)					
	Wilson, Horace G., Cincinnati, Ohio. Printer's distributing-galley ..	Apr. 2, 1878	108	32	13	615
	Wilson, Isaac A. (See Wilson, Liston B., assignor.)					
202, 211	Wilson, James E., Bridgeport, Conn. Plaiting-machine ..	Apr. 9, 1878	373	110	13	656
202, 908	Wilson, James E., Chicago, Ill. Trimmer for sewing-machines ..	Apr. 23, 1878	1146	329	13	767
199, 948	Wilson, James G., New York, N. Y. Connecting blind-slats ..	Feb. 5, 1878	60	19	13	242
202, 972	Wilson, James L., and Robert G. Morrow, Calhoun, Ga. Plow ..	Apr. 30, 1878	1223	353	13	783
203, 396	Wilson, Jefferson, Beaver Falls, Pa. Gate ..	May 7, 1878	168	48	13	843
207, 676	Wilson, John H., Russel Township, Putnam County, Ind. Ditching-machine ..	Aug. 27, 1878	768	229	14	315
	Wilson, Joseph F. (See Nason & Wilson) .. (Reissue.)					
202, 619	Wilson, Joseph M., Philadelphia, Pa. Water-closet ..	Apr. 16, 1878	822	238	13	718
204, 693	Wilson, Joseph Shields, assignor to William Cramp & Son's Ship and Engine Building Company, Philadelphia, Pa. Governor-controlling mechanism ..	June 11, 1878	278	86	13	1055
207, 468	Wilson, L. Erwin, and James E. McCauley, Burnsville, N. C. Side-hill plow ..	Aug. 27, 1878	867	256	14	327
207, 787	Wilson, Levi, Nevada, Ohio. Buckle ..	Sept. 3, 1878	207	63	14	375
208, 941	Wilson, Liston B., Caldwell, assignor to self and Isaac A. Wilson, Zanesville, Ohio. Reciprocating churn ..	Oct. 15, 1878	534	157	14	572
201, 317	Wilson, Matthew, London, England. Stench-trap ..	Mar. 12, 1878	514	157	13	497
202, 909	Wilson, Moses, Pocahontas, Ark. Combined transplant and hoe ..	Apr. 23, 1878	1147	329	13	767
	Wilson Packing Company. (See Haines, Peter P., assignor.)					
	Same.....(See Mather & Gleason, assignors.)					
207, 146	Wilson, Peter K. (See Wilson, Byrce A., assignor.)					
	Wilson, Robert and Daniel McCallay, Middletown, Ohio. Tobacco-cutting machine ..	Aug. 20, 1878	520,	156	14	278
	Wilson, Sarah H. (See Wilson, William A., assignor.)					
	Wilson Sewing Machine Company. (See Whitney, Ruel W., assignor.) .. (Reissue.)					
202, 084	Wilson, Thomas F., Rochester, Pa. Grate-fender ..	Apr. 2, 1878	225	65	13	631
204, 694	Wilson, Thomas M., Moberly, Mo. Hog-cholera compound ..	June 11, 1878	279		13	1055
202, 973	Wilson, Thomas McCorkle, Venice, Pa. Farm-gate ..	Apr. 30, 1878	1224	354	13	782
207, 232	Wilson, Tolivar A., San Francisco, Cal. Washing-machine ..	Aug. 20, 1878	609	183	14	289
8, 169	Wilson, Washington, New York, N. Y. Collar .. (Reissue.)	Apr. 9, 1878	505	147	13	674
	Wilson, William, jr. (See Green & Wilson) .. (Reissue.)					
	Same.....same ..					
203, 689	Wilson, William A., Boston, assignor to Sarah H. Wilson, Chelsea, Mass. Electric register and time-recorder ..	May 14, 1878	486	138	13	894
204, 179	Wilson, William F., Columbia, Pa. Clothes-drier ..	May 28, 1878	1039	296	13	975
202, 499	Wilz, John, Santa Cruz, Cal. Pruning-shears ..	Apr. 16, 1878	679	199	13	703
210, 284	Same.....Hose-carriage ..	Nov. 26, 1878	833	246	14	803
202, 688	Wimpee, George W. and William F., Centre, Ala. Plow ..	Apr. 23, 1878	916	261	13	738
	Wimpee, William F. (See Wimpee, George W. and William F.)					
198, 829	Winchell, Alvin T., Albion, Mich. Windmill ..	Jan. 1, 1878	108	31	12	25
204, 271	Winchell, Edwin H., Chicago, Ill. Railway-car-ventilator valve ..	May 28, 1878	1133	324	13	987
208, 658	Winchell, James B., and Joseph W. Hänsel, Saint Joseph, Mich. Vehicle sand-band ..	Oct. 1, 1878	209	60	14	517
201, 079	Winchell, James F., Springfield, Ohio. Force-feed for grain-drills ..	Mar. 5, 1878	257	81	13	453
199, 389	Winchester, Edward S., assignor of one-half interest to Harvey K. Flagler, Boston, } Mass. Rock-drill ..	Jan. 22, 1878	703	{ 207 208 }	{ 13 13 }	{ 133 133 }
208, 448	Winchester, Edward S., South Boston, Mass. Rock-drill ..	Sept. 24, 1878	946	278	14	481
208, 449	Same.....same ..	Sept. 24, 1878	947	278	14	481
208, 450	Same.....Boring-machine ..	Sept. 24, 1878	949	278	14	481
209, 096	Winchester, Lucius A., White Water, Wis. Vehicle-axle skein ..	Oct. 15, 1878	710	206	14	395
	Winchester Repeating Arms Company. (See Gardner, John, assignor.)					
	Same.....(See Hill, Martin V. B., assignor.)					
	Same.....(See Sessions, Asa, assignor.)					
	Same.....(See Wetmore, William W., assignor.)					
208, 780	Winder, John C., Raleigh, N. C. Car-indicator ..	Oct. 8, 1878	346	99	14	542
204, 695	Winebrenner, John A., Jefferson, assignor of two-thirds interest to M. H. Winebrenner and Cora A. Emmert, Chicago, Ill. Irrigating device ..	June 11, 1878	279	87	13	1055
	Winebrenner, M. H., et al. (See Winebrenner, John A., assignor.)					
210, 177	Wing, Jonas, Hoosick Falls, N. Y. Clothes-rack ..	Nov. 19, 1878	703	209	14	782
200, 783	Wing, Lewis T., Larson, Cambridge, assignor of one-half interest to H. O. Hendrickson, Sheldahl, Iowa. Fence-barb ..	Feb. 26, 1878	931	274	13	399
204, 180	Wingard, Adam, San Francisco, Cal. Paddle-wheel ..	May 28, 1878	1040	296	13	975
204, 120	Wingate, Julia F., Boston, Mass. Dress-maker's square ..	May 21, 1878	954	273	13	960
206, 056	Wingler, George W., and Will W. Stough, Shippensburg, Pa. Spring for side-bar wagons ..	July 16, 1878	661	191	14	101
204, 932	Wingler, Henry C., and Will W. Stough, Shippensburg, Pa. Jump-seat for wagons ..	June 18, 1878	558	{ 162 163 }	{ 13 13 }	{ 1003 1003 }
	Winhofer, John. (See Cunningham, Winhofer & Rice.)					
209, 785	Winkel, William, Pluckemin, N. J. Sash-fastener ..	Nov. 12, 1878	277	83	14	722
205, 163	Winkler, George H., Augusta, Ga. Siphon ..	June 18, 1878	786	233	13	1123
	Winkler, Henry T. (See Sievers & Winkler.)					
199, 340	Winn, George L., and Jonathan Bliss, Jersey City, N. J., assignors to W. L. Palmer, New York, N. Y. Die for forming articles of plastic materials ..	Jan. 15, 1878	643	188	13	116
	Winn Manufacturing Company. (See Dusenbury & Winn, assignors.)					
	Winn, Willis H. (See Dusenbury & Winn.)					
205, 226	Winne, William I., Albany, N. Y. Device for fastening barrel heads and covers ..	June 25, 1878	867	256	13	1139
201, 899	Winship, Charles A., Brooklyn, N. Y. Sewer-trap ..	Apr. 2, 1878	41	11	13	605
	Winship, Eugene B., et al. (See Hodges, George, assignor.)					
	Winship, Theron S., et al. (See Hodges, George, assignor.)					
207, 636	Winslow, Freeman, Salem, Mass. Implement for napping the fibers of shoe-soles ..	Sept. 3, 1878	55	16	14	356
199, 390	Winslow, George S., Cedar Rapids, Iowa. Gasket for car-axle boxes ..	Jan. 22, 1878	705	208	13	124
201, 213	Same.....Switch-head chair ..	Mar. 12, 1878	393	121	13	481
201, 214	Winslow, Joseph L., Portland, Me. Locomotive and fire-box boiler ..	Mar. 12, 1878	395	122	13	482
203, 688	Same.....Boiler-furnace ..	May 14, 1878	485	138	13	894
	Winsor, Alba W. A. (See Cooley & Winsor.)					



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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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201, 857 8, 325	Winsor, John J., East Saginaw, Mich. Car-heater.....	Mar. 26, 1878	1086	330	13	500
207, 329	Winsor, Joseph S., Providence, R. I., assignor, by mesne assignments, to Stephen A. Jenks. Gate..... (Reissue)	July 9, 1878	536	153	14	81
207, 330	Winsor, Joseph S., Providence, R. I. Cloth-drying machine.....	Aug. 20, 1878	704	210	14	302
207, 331	Same..... Wire-drawing machine.....	Aug. 20, 1878	706	211	14	302
206, 696	Same..... Machine for tapping nuts.....	Aug. 20, 1878	707	211 212	14	302
208, 942	Winston, Alexander, assignor of two-thirds interest to Oliver A. Daud, Fayette, Iowa. Draft-equalizer.....	Aug. 6, 1878	41	12	14	211
206, 758	Winter, David T., assignor of one-half interest to Charles E. Teague, Peabody, Mass. } Device for measuring and weighing skins.....	Oct. 15, 1878	535	157 158	14	572
210, 388	Winter, John, assignor of one-half interest to Charles Maschmeyer, Saint Louis, Mo. Punching, knotting, and stringing machine for tags, pamphlets, &c.....	Aug. 6, 1878	100	32	14	219
203, 974	Winterbotham, Robert, assignor to Brown, Hinman & Co., Columbus, Ohio. Grain-cradle.....	Nov. 26, 1878	954	278	14	818
203, 975	Winters, Francis. (See Waring, Darrow & Winters.)					
203, 517	Winters, John D., Grand Island, Cal. Wagon-derrick.....	May 21, 1878	709	229	12	941
206, 515	Same..... Netting for unloading wagons.....	May 21, 1878	800	229	13	941
203, 398	Winters, Joseph R., assignor of one-fourth interest to John H. Oyler and Theo. McGowan, Chambersburg, Pa. Fire-escape ladder.....	May 7, 1878	293	84	13	861
203, 306	Winters, Marcellus. (See Risdon, James A., assignor.)					
211, 075	Wires, Ephraim L., assignor of one-half interest to Joseph M. Estabrook, Milford, Mass. Shoe-nail.....	July 30, 1878	1212	348	14	178
203, 398	Wisda, John, Defiance, Ohio. Braco for thrashing-machine.....	May 7, 1878	170	49	13	844
203, 306	Wise, Judson. (See Mattocks & Wise.)					
210, 828	Wise, Thomas, Ashland, Mass. Fan-blower.....	May 7, 1878	77	23	13	830
211, 075	Wiser, David, Plymouth, Ind. Spark-arrester.....	Dec. 10, 1878	476	134	14	895
201, 858	Wisewell, Lucius N., assignor of one-half interest to Joseph F. Hanrahan, Ottawa, Ontario, Canada. Garden-sprinkler.....	Dec. 17, 1878	701	217	14	941
206, 288	Wisner, Albert, Bridgeport, Conn. Apparatus for applying button-staples to shoes, &c. Wisner, Albert, and James Alford House, Bridgeport, Conn.; said House assignor to said Wisner. Tool for fastening buttons to boots and shoes.....	Mar. 26, 1878	1086	330	13	590
208, 943	Wissen, Joseph, Decatur, Ill. Counter-support and seam-protector for boots and shoes.....	July 23, 1878	940	266	14	140
190, 391	Wissinger, Thomas W., West Milton, Ohio. Auger.....	Oct. 15, 1878	538	158	14	572
8, 033	Witherbee, Thomas Francis, Port Henry, N. Y. Tuyere..... (Reissue)	Jan. 22, 1878	707	208	13	134
190, 134	Same..... same.....	Jan. 8, 1878	437	128	13	84
208, 004	Same..... same.....	Jan. 8, 1878	425	125	13	82
202, 318	Withers, Edwin D., Bently Springs, Md. Telegraph-pole.....	Sept. 10, 1878	453	136	14	410
207, 835	Wither, A. Edwin, et al. (See Collyer, Charles W., assignor.)					
204, 272	Withington, Charles B. (See Baker & Withington.)					
207, 835	Withington & Cooley Manufacturing Company. (See Beebe, Calvin T., assignor.)					
204, 272	Witsell, George L., assignor of one-half interest to N. M. Bennett, Philadelphia, Pa. Game-apparatus.....	Apr. 9, 1878	487	143	13	672
204, 272	Witsell, George L., assignor of one-half interest to Thomas L. Bates, Philadelphia, Pa. Game-table.....	Sept. 10, 1878	268	83	14	386
206, 205	Witte, Edward L., White Mills, Pa. Labeling bottles.....	May 28, 1878	1134	325	13	987
206, 205	Witter, Elijah M. (See Reno, William, assignor.)					
206, 901	Witthoft, William, Indianapolis, Ind. Combined arm-chair and step-ladder.....	July 23, 1878	840	242	14	128
205, 164	Wittman, John M., Saint Mary's, Pa. Lock for fire-arms.....	Aug. 13, 1878	351	108	14	253
200, 784	Wixson, Robert, Sparta, Ga. Turning-plow and attachment.....	June 18, 1878	787	233	13	1124
199, 392	Woelfel, Christian, and James Massey, Chester, Pa. Giggling-machine for napping cloth.....	Feb. 26, 1878	932	274	13	399
203, 976	Woerd, Charles V., assignor to American Watch Company, Waltham, Mass. Potance for watches.....	Jan. 22, 1878	707	208	13	134
208, 944	Woerd, Charles V., Waltham, Mass. Compensation-balance.....	May 21, 1878	801	230	13	941
201, 473	Woglom, William H. (See Vanhorn, Joseph S., assignor.)					
204, 121	Wohlmann, Valentine, Cincinnati, Ohio. Fire-escape.....	Oct. 15, 1878	539	158	14	572
203, 600	Wolbrocht, John M., assignor to John Sherman and W. T. Hotchkiss, Washington, D. C. Instrument for transmitting diagrams.....	Mar. 19, 1878	681	208	13	528
209, 068	Wolf, Abraham N., Allentown, Pa. Grinding-mill.....	May 21, 1878	954	273	13	960
207, 469	Wolf, Daniel. (See Hillebrand, Louis, assignor.)					
207, 470	Wolf, David, Avon, Pa. Plow-point.....	May 14, 1878	489	138	13	894
207, 470	Wolf, David C., Keota, Iowa, assignor of one-half interest to Jacob S. Kulp. Striking attachment for clocks.....	Oct. 15, 1878	212	206	14	505
190, 675	Wolf, Frederick W., Chicago, Ill. Hose-clamp.....	Aug. 27, 1878	868	256	14	327
190, 675	Same..... Hose-coupling.....	Aug. 27, 1878	868	256	14	327
190, 888	Wolf, Henry L. R., Dayton, Ohio. Paper dish.....	Jan. 29, 1878	1021	297	13	191
200, 235	Wolf, John George, New York, N. Y. Stopper-fastening attachment to bottling-machines.....	Jan. 29, 1878	1217	357	13	221
202, 085	Same..... Alarm-lock.....	Feb. 12, 1878	348	104	13	295
206, 635	Same..... Artificial tree.....	Apr. 2, 1878	225	66	13	631
207, 089	Same..... Double-acting pump.....	July 30, 1878	1359	390	14	196
203, 380	Wolf, Leopold, and Marcus Loeb, New York, N. Y. Clasp for pocket-books, &c.....	Aug. 13, 1878	445	137	14	265
204, 381	Wolfe, W. F. (See Wolfe, Gurdon G., assignor.)					
206, 408	Wolfe, William C., Johnstown, Pa. Rotary engine.....	July 23, 1878	1051	302	14	153
208, 811	Same..... Water-inductor for steam-boilers.....	July 23, 1878	1053	303	14	153
206, 659	Same..... Steam-boiler.....	July 30, 1878	1098	314	14	164
208, 659	Wolfe, Gurdon G., assignor to W. F. Wolfe, Troy, N. Y. Cooking-stove.....	Feb. 26, 1878	959	283	13	403
208, 153	Wolfe, Gurdon G., assignor to Wolfe Stove Company, Troy, N. Y. Parlor-stove.....	Oct. 1, 1878	210	60	14	517
201, 319	Wolfe, Henry H., Salisbury, Conn. Ventilating cars.....	Sept. 17, 1878	597	177	14	434
208, 438	Wolfe, Horace S., Elkhart, Ind. Gate.....	Mar. 12, 1878	516	158	13	497
202, 911	Wolfe Stove Company. (See Wolfe, Gurdon G., assignor.)					
200, 158	Wolfenden, Shoro & Co. (See Goodyear, Robert B., assignor.)					
199, 246	Wolffington, William P., Louisville, Ky. Harness-cutter's vise.....	Oct. 29, 1878	1064	315	14	655
206, 848	Wolfe, Joseph A., White Cloud, Kans. Grain-bin.....	Apr. 28, 1878	1148	330	13	768
207, 900	Wolfram, Eli J., Washingtonville, Ohio. Ironing-board.....	Feb. 12, 1878	277	83	13	284
207, 900	Wolle, Charles E. and Samuel Munyon, Philadelphia, Pa., assignors to said Wolle. Apparatus for carbureting air.....	Jan. 15, 1878	545	160	13	101
207, 900	Wollenberg, Hermann, and Josef Priesner, Berlin, Prussia, Germany. Fur-guide for glove-sewing machine.....	Aug. 6, 1878	200	63, 64	14	231
207, 900	Wolridge, James M., Atlantic, Iowa. Barber's chair.....	Sept. 3, 1878	209	64	14	375
201, 877	Woltz, George W. J., Greenfield, Ohio. Fire-back.....	Jan. 8, 1878	250	72	13	54
201, 877	Wood, Arthur, Grand Rapids, Mich. Side-spring vehicle.....	May 21, 1878	802	230	13	941
210, 734	Wood, Benjamin L., Taunton, Mass. Car-window.....	Mar. 26, 1878	1088	331	13	500
210, 734	Wood, Charles, Middlesbrough, England. Permanent way of railways.....	Dec. 10, 1878	379	104	14	881



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204, 470	Wood, Charles H., assignor of one-half interest to W. H. Shoudy, Seattle, Wash. Car-coupling .....	June 4, 1878	52	17	13	1020
203, 308	Wood, Clarence A., Wappinger's Falls, N. Y. Sleeve or collar button .....	May 7, 1878	79	24	13	831
203, 864	Wood, Clark, Cochran, Pa. Grain-separator .....	May 21, 1878	682	194	13	925
202, 912	Wood & Co., Albn. (See Wood, Howard, assignor.) .....					
202, 130	Wood, David S., assignor to Margaret Wood, Oswego, Kans. Weather-strip .....	Apr. 23, 1878	1149	330	13	768
208, 382	Wood, Edwin A., Utica, N. Y. Air-valve .....	Apr. 9, 1878	291	86	13	645
290, 116	Wood, Frederick W., New York, N. Y. Window-screen .....	July 23, 1878	1054	303	14	153
205, 024	Wood, George W., assignor of one-half interest to H. T. Davis, Athens, Tenn. Clothes-pounder .....	Feb. 5, 1878	228	70	13	268
205, 939	Wood, George W., deceased, Hetty Wood, administratrix and assignor to Mark M. Stanfield, New York, N. Y. Dress-shield .....	June 18, 1878	645	190	13	1104
207, 788	Wood, Henry A., Bangor, Me. Cooking-stove .....	July 9, 1878	527	150	14	79
202, 621	Same. Wood-burning furnace .....	Sept. 3, 1878	207	64	14	375
204, 273	Wood, Henry S., New York, N. Y. Mirror .....	Apr. 16, 1878	824	238	13	719
199, 135	Wood, Henry S., Rob Roy, Ark. Lap-ring .....	May 28, 1878	1134	325	13	987
200, 236	Wood, Hetty. (See Wood, George W.) .....					
206, 409	Wood, Howard, Conshohocken, assignor to Alan Wood & Co., Philadelphia and Conshohocken, Pa. Art of marking sheet-metal plates .....	Jan. 8, 1878	426	123	13	82
	Wood & Hughes. (See Van Praag, Leon, assignor.) .....					
	Wood, Isaac Newton, and Alexander Morton, Wilmington, Del. Sash-fastener .....	Feb. 12, 1878	350	104	13	295
	Wood, James, et al. (See Douglas, Robert, assignor.) (Reissue.) .....					
	Wood, James A., Gaynorsville, Ind. Harrow attachment for wheel-plows .....	July 30, 1878	1100	314	14	164
	Wood, Jehu, jr., et al. (See Bense, Jacob, assignor.) .....					
	Wood, John F. (See Milligan & Wood.) .....					
	Wood, John H. (See Forman, Joseph, assignor.) .....					
	Wood, Jonathan E. (See Howdon & Wood.) .....					
207, 471	Wood, Joseph S., Brooklyn, N. Y. Vapor-burning lamp .....	Aug. 27, 1878	869	257	14	327
208, 553	Wood, Lucius A., assignor of one-half interest to Joseph Tillotson, Worcester, Mass. Head-light for locomotives .....	Oct. 1, 1878	95	28	14	502
208, 660	Wood, Margaret. (See Wood, David S., assignor.) .....					
207, 928	Wood, Marshall, Alderson, W. Va. Steam or air brake .....	Oct. 1, 1878	210	60	14	517
205, 713	Wood, Richard G., Cincinnati, Ohio. Sewing-machine .....	Sept. 10, 1878	371	113	14	399
210, 735	Wood, Robert B., Richmond, Va. Medicinal beverage .....	July 2, 1878	266		14	42
206, 063	Wood, W. Dewees, Pittsburgh, Pa. Manufacture of cleaned and planished iron .....	Dec. 10, 1878	380		14	881
208, 277	Wood, Wade P., Leon, Iowa. Automatic wagon-brake .....	July 16, 1878	667	193	14	102
199, 484	Woodbridge, Henry D., Newark, Ohio. Letter-file .....	Sept. 24, 1878	770	225	14	458
202, 913	Woodbridge, Theodore F., and Andrew P. Gerlach, Mendota, Ill. Treadle-motion .....	Jan. 22, 1878	792	233	13	148
200, 785	Woodbury Brothers et al. (See McKnight, William, assignor.) .....					
207, 789	Woodbury, Frank P., Rockford, Ill. Attachment for stenciling-pens .....	Apr. 23, 1878	1150	330	13	768
209, 950	Woodbury, John H., Albany, N. Y. Inset-holder .....	Feb. 26, 1878	933	274	13	390
202, 209	Woodbury, Seth H., and William T. Gray, Lynn, Mass. Chair-bottom .....	Sept. 3, 1878	208	64	14	375
203, 809	Woodford, Charles W. (See Allen, Nathaniel R., assignor.) .....					
209, 439	Woodgate, James H., Waveland, Ind. Corn-planter .....	Nov. 12, 1878	448	136	14	745
202, 209	Woodhull, Anna Matilda, Freehold, N. J. Sandal .....	Apr. 9, 1878	372	109	13	655
209, 439	Woodman, Henry Nelson, Springfield, Mass. Fire-kindler .....	May 14, 1878	615	172	13	909
202, 622	Woodmansee, Horace, Saco, Me. Shuttle-motion for looms .....	Oct. 29, 1878	1085	315 316 238 239	14	655
202, 500	Woodmansee, Joseph A., New Vienna, Ohio. Car-coupling .....	Apr. 10, 1878	825		13	719
205, 457	Woodrough, James R., assignor to self and Woodrough & McParlin, Cincinnati, Ohio. Hand-saw .....	Apr. 16, 1878	680	199	13	703
204, 647	Woodrough & McParlin. (See Woodrough, James R., assignor.) .....					
200, 638	Woodruff, Julia, Detroit, Mich. Fruit-jar holder .....	June 25, 1878	1103	327	13	1170
	Woodruff, Lyman, Ellensburg, Oreg. Method of curing fish .....	June 4, 1878	221		13	1044
	Woodruff, Oliver D., Southington, Conn. Machine for separating iron from foundry refuse .....	Feb. 26, 1878	784	230	13	377
205, 165	Woodruff Sleeping Car and Parlor Coach Company. (See Robinson, Edward, assignor.) .....					
8, 129	Woodruff, William P., assignor of one-half interest to John A. Baldwin, Chicago, Ill. Piston-packing .....	June 18, 1878	787	234	13	1124
200, 850	Woods, C. W., et al. (See Smith, George F., assignor.) (Reissue.) .....					
200, 851	Woods, George, assignor to self and George P. Carter, Cambridgeport, Mass. Drying lumber .....	Mar. 19, 1878	810	247	13	546
210, 888	Woods, George, Cambridgeport, Mass. Piano case and frame .....	Mar. 5, 1878	37	13	13	420
208, 045	Same. Reed-organ .....	Mar. 5, 1878	38	13, 14	13	421
202, 131	Same. Note-indicator for musical instruments .....	Dec. 17, 1878	560	157	14	912
210, 389	Woods, Granville Alexander, Dumas, Miss. Seed-planter .....	Oct. 15, 1878	540	159	14	572
203, 978	Woods, James, jr., Somerville, Mass. Carriage-window .....	Apr. 9, 1878	292	86	13	645
204, 408	Same. Carriage-curtain fastening .....	Nov. 26, 1878	955	278	14	816
	Woods, Jordan, assignor to Benjamin F. Johnson, Glasgow, Mo. Tobacco-germer .....	May 21, 1878	803	230	13	941
	Woods, Thomas J., Westley, R. I. Lifting-jack .....	May 28, 1878	1270	364	13	1004
208, 133	Woodward, Abner. (See Bovey, George C., assignor.) .....					
8, 003	Woodward, Charles Rollins. (See Dinkle & Woodward.) .....					
205, 327	Woodward, Daniel J. (See Birge, Woodward & Rowell.) .....					
210, 390	Woodward, Erastus. (See Copeland, Woodward & Brock.) (Reissue.) .....					
207, 147	Same. Same. .....					
208, 700	Woodward, Erastus, and Edward D. Goodson, Boston, Mass. Punching and feeding device for cycling-machines .....	Sept. 17, 1878	598	177 178	14	434
200, 420	Woodward, Henry F., New York, N. Y. Overalls .....	Feb. 19, 1878	734	215	13	362
204, 646	Woodward, John H., et al. (See McKnight, William, assignor.) .....					
205, 327	Woodward, Russell G. (See Armstrong, Woodward & Muther.) .....					
210, 390	Woodward, William Albert, North Tunbridge, Vt. Draft-adjuster for plows .....	June 25, 1878	977	289	13	1153
207, 147	Woodward, Willis W., Athens, Ga. Cotton-planter .....	Nov. 26, 1878	956	278	14	810
208, 700	Woodworth, Elton G., Pittsburgh, Pa. Wash-boiler .....	Aug. 20, 1878	521	157	14	278
	Wookey, Henry E., Chicago, Ill. Window-screen .....	Oct. 8, 1878	262	75	14	531
200, 420	Woolcocks, George O. (See Woolcocks, Thomas J. and George O.) .....					
204, 871	Woolcocks, Thomas J. and George O., Jersey City, N. J. Speaking-tube .....	Feb. 19, 1878	552	163	13	334
	Woolbridge, Joseph Flood, John Frederick Nystrom, and Lyman Dean Howard, Richmond, Va. Lump-tobacco machine .....	June 11, 1878	473	137 138	13	1078
	Woolen Fabric Company (limited.) (See Field, George B., assignor.) .....					
204, 646	Woolford, William W. (See Smith & Woolford.) .....					
205, 362	Woolley, Edwin, Newark, N. J., assignor to Seeley & Solley, New York, N. Y. Hat-brim .....	June 4, 1878	221	70	13	1043
	Woolley, Edwin, Newark, N. J. Hat-finishing machine .....	June 25, 1878	976	289	13	1153

## Alphabetical list of patentees for the year 1878—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
207, 377	Woolley, Leonidas G., Mendon, Mich. Electro-magnetic fire-engine and alarm.....	Aug. 27, 1878	769	{ 229 230 }	14	315
206, 912	Woolsey, Gilbert R., Normal, Ill. Driving-rein for two horses .....	Aug. 13, 1878	281	85	14	244
206, 501	Woolsey, James Warner, Henderson, Minn. Stove-pipe-joint lock .....	Apr. 16, 1878	680	200	13	704
	Woolsey, Jerome. (See Everson, Charles R., assignor.)					
	Woolson, A. N. (See Frost, Henry S., assignor.)					
207, 090	Woolson, Amasa, Springfield, Vt. Rest for cloth-shearing machine .....	Aug. 13, 1878	446	{ 137 138 }	14	265
207, 091	Same.....	Aug. 13, 1878	449	138	14	265
207, 092	Same.....	Aug. 13, 1878	450	138	14	265
207, 929	Woolson, Egbert, Springfield, Mass. Rest for cloth-shearing machines.....	Sept. 10, 1878	374	113	14	399
208, 451	Woolson, Henry C., Buffalo, N. Y. Tinner's stock .....	Sept. 24, 1878	950	279	14	481
206, 062	Woolverton, John E., Indianapolis, Ind., assignor of one-half interest to Darwin De Wolf, Chattanooga, Tenn. Motive power .....	July 16, 1878	667	192	14	162
205, 777	Wooster, Daniel B., Marshfield, Vt. Milk-cooler .....	July 9, 1878	353	102	14	57
	Wooster, George H. (See Robjohn, Thomas, assignor) (Reissue.)					
	Wooster, Levi S., et al. (See Blakeslee, Charles W., assignor.)					
203, 233	Wootten, John E., Philadelphia, Pa. Grate for steam-boiler furnaces .....	Apr. 30, 1878	1482	434	13	815
203, 518	Same..... Feed-water heater for locomotives .....	May 7, 1878	294	84	13	861
	Worcester Corset Company. (See Marble, William A., assignor.)					
201, 080	Worick, Jeremiah, Ames, Iowa. Grain-separator .....	Mar. 5, 1878	258	81	13	454
202, 392	Work, Alanson, Providence, R. I., assignor to Benjamin F. Goodrich, Akron, Ohio. Electric hose-coupling .....	Apr. 16, 1878	577	170	13	689
203, 307	Work, Alanson, Providence, R. I. Swivel-joint .....	May 7, 1878	78	23	13	830
205, 458	Workman, Rease W., assignor of one-half interest to John R. London, Rock Hill, S. C. Plow .....	June 25, 1878	1104	327	13	1170
	Worley, Bartholomew W. (See Tucker, Hiram, assignor.)					
	Worley, Christian. (See Miller & Worley) (Reissue.)					
	Worman, Absalom B. (See Miller & Worman.)					
204, 274	Wormelle, Benjamin, Brighton, Mass. Watch-winding device .....	May 28, 1878	1135	325	13	987
	Wormser & Co., S. (See Feltheimer, August, assignor) (Reissue.)					
204, 935	Worrell, Stanley E., Hannibal, Mo. Corn and grain cleaner .....	June 18, 1878	561	163	13	1093
205, 778	Same..... Handling grain .....	July 9, 1878	353	102	14	57
	Worsham, Lewis. (See Williams & Worsham.)					
	Worswick, James R. (See Prindle, John A., assignor.)					
	Worswick Manufacturing Company. (See Class, William F., assignor) (Reissue.)					
201, 640	Worth, Samuel L., and Joseph H. Pontifex, London, England. Water-proof garment..	Mar. 26, 1878	873	266	.....	559
207, 472	Worth, William Ellison, San Francisco, Cal. Stench or basin trap valve .....	Aug. 27, 1878	870	257	14	327
202, 319	Worthen, William Ezra, and Richard Stephen Gillespie, New York, N. Y. Stop-valve.	Apr. 9, 1878	488	143	13	672
205, 779	Worthen, William Ezra, New York, N. Y. Hydraulic connection for a series of wells or cisterns .....	July 9, 1878	354	102	14	57
207, 378	Same..... Waste-water detector .....	Aug. 27, 1878	772	230	14	316
205, 023	Worthington, Henry S., Covington, Ky. Bale-tie.....	June 18, 1878	644	190	13	1104
203, 332	Worthington, Hugo, Liverpool, Great Britain. Sash-holder .....	Apr. 30, 1878	1481	433	13	815
8, 216	Wortman, Peter C., Greenville, Mich., assignor, by mesne assignments, to Ashton Valve Company, Hartford, Conn. Feed-water heater .....	May 7, 1878	308	88	13	863
207, 332	Wortman, William B., Louisville, Ky. Umbrella-sign .....	Aug. 20, 1878	709	212	14	303
201, 474	Wotring, Jehu F., Ogden Centre, Mich. Ditching-machine .....	Mar. 19, 1878	683	209	13	529
	Wragg, Samuel. (See Brocius, Bensinger & Wragg.)					
199, 136	Wray, David A. (See Minniss & Wray.)					
199, 676	Wright, Arthur S., Moline, Ill. Pump .....	Jan. 8, 1878	427	125	13	82
	Wright, Arthur W., New Haven, Conn., assignor to Abraham L. Bogart, New York, N. Y. Electric attachment for gas-burners .....	Jan. 29, 1878	1021	297	13	191
208, 355	Wright, Charles A., assignor of one-half interest to George B. Wright, New Haven, Conn. Lawn-mower .....	Sept. 24, 1878	847	247	14	469
	Wright, E. M. (See Pratt, Orrin, assignor.)					
208, 946	Wright, Edward, Worcester, Mass. Mechanism for operating doffer-combs.....	Oct. 15, 1878	541	159	14	572
207, 582	Wright, Edward M., Washington, D. C. Cartridge .....	Aug. 27, 1878	1001	293	14	344
	Wright, Ezra P. (See Shibley & Wright.)					
204, 936	Wright, George, assignor to Helen M. Marcy, Chicago, Ill. Locking-seam for metal ware .....	June 18, 1878	561	164	13	1093
	Wright, George B. (See Wright, Charles A., assignor.)					
205, 025	Wright, George W., Fishersburg, Ind. Sulky-plow .....	June 18, 1878	645	190	13	1105
	Wright, Gilbert G., et al. (See Morris, James P., assignor.)					
	Wright, Harrison, et al. (See Stevens, Charles V., assignor.)					
208, 662	Wright, Homer, Pittsburg, Pa. Mold for bottle-stopper cages .....	Oct. 1, 1878	213	61	14	517
209, 909	Wright, Irwin Stanford, Centerville, Cal. Wagon-brake .....	Nov. 19, 1878	518	156	14	757
207, 333	Wright, Isaac H., Baltimore, Md. Apparatus for hatching fish-eggs .....	Aug. 20, 1878	709	212	14	303
207, 148	Wright, Jacob, and George McNary, Delafield, Wis. Corn-planter .....	Aug. 20, 1878	522	157	14	278
203, 519	Wright, Jacob D., Worcester, Mass. Pawl and ratchet device .....	May 7, 1878	295	84	13	861
210, 178	Wright, James Chidzy, Louisville, Ky. Store-shelving .....	Nov. 19, 1878	704	210	14	783
199, 485	Wright, James L., Wilmot, Wis. Corn-dropper for planters .....	Jan. 22, 1878	793	233	13	148
199, 889	Wright, John Thomas, Columbia, Tenn. Seed-dropper .....	Jan. 29, 1878	1218	358	13	221
209, 099	Wright, Josiah H., Des Moines, Iowa. Weighing apparatus .....	Oct. 15, 1878	713	206	14	595
201, 973	Wright, Lemuel W., Brooklyn, N. Y. Apparatus for bleaching or dyeing .....	Apr. 2, 1878	110	32	13	615
207, 334	Same..... Bleaching or dyeing fabrics in bulk .....	Aug. 20, 1878	710	.....	14	303
	Wright, M. B. (See Brown, Thomas, assignor.)					
	Wright, Marcus I. (See Howard, James R., assignor.)					
208, 217	Wright, Martin V. B., Fort Worth, Tex. Water-elevator .....	Sept. 17, 1878	689	203	14	445
203, 334	Wright, Medad and Prentiss C., Montpelier, Vt. Stone and glass polisher .....	Apr. 30, 1878	1483	434	13	815
	Wright, Parvin. (See Wright, Robert B. and Parvin.)					
199, 887	Wright, Peter B., Chicago, Ill., assignor of one-half interest to Harvey B. Merrell, Morristown, N. J., and Thomas Ferguson, Detroit, Mich. Fire-proof column .....	Jan. 29, 1878	1216	357	13	221
	Wright, Prentiss C. (See Wright, Medad and Prentiss C.)					
	Wright, Ransom C. (See Roberts, Legrand J., assignor.)					
205, 026	Wright, Robert B. and Parvin, Rock Creek, Wyo. Hay-rake and baling-press .....	June 18, 1878	646	191	13	1105
208, 661	Wright, Sheffield H., Indianapolis, Ind. Machine for manufacturing boxes and trays..	Oct. 1, 1878	211	60	14	517
201, 475	Wright, Thomas R., Philadelphia, Pa. Scissors .....	Mar. 19, 1878	685	209	13	529
	Wright, W. H. (See Strohm, Samuel D., assignor.)					
203, 098	Wright, William, Warrior Station, Ala. Shears for marking stock .....	Apr. 30, 1878	1339	389	13	797
206, 383	Wright, William D., Baltimore, Md. Sash-holder .....	July 23, 1878	1055	303	14	153
201, 583	Wright, William H., Rochester, N. Y. Vehicle-wheel hub .....	Mar. 19, 1878	801	244	13	544
208, 874	Wright, William H., North Tarrytown, N. Y. Harvester guard-finger .....	Oct. 8, 1878	454	131	14	557
202, 086	Wright, William L., Hudson, N. Y. Ventilator for corn-cribs .....	Apr. 2, 1878	226	66	13	631

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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199, 243	Wrightman, Joseph C., Boston, Mass. Power sheep-shears .....	Jan. 15, 1878	542	160	13	101
200, 237	Wroth, Lafayette, assignor of two-thirds interest to George W. Kirby and Lewis Thornburg, Winterset, Iowa. Steam feed-cooker .....	Feb. 12, 1878	351	104	13	296
200, 159	Wyckoff, Cornelius Peter, Mobile, Ala. Boat-detaching apparatus .....	Feb. 12, 1878	279	83	13	284
203, 399	Wyckoff, George D., Philadelphia, Pa. Buoy .....	May 7, 1878	170	49	13	844
208, 452	Wyeth, David G., Newway, Ohio. Vehicle-spring .....	Sept. 24, 1878	951	279	14	482
201, 729	Wygant, John H., assignor to William H. De Wolf and John B. Bogert, Hackensack, N. J. Wheeled toy .....	Mar. 20, 1878	955	292	13	571
202, 914	Wyllie, J. M. (See Wiles, George W., assignor.) .....					
202, 132	Wyman, Charles E., Martinsburg, Ind. Spark-arrester .....	Apr. 23, 1878	1151	330	13	768
203, 520	Wyman, Charles H., Saint Louis, Mo. Egg carrier and tester .....	Apr. 9, 1878	293	86	13	645
204, 400	Wyman, Martin L., Boston, Mass. Hydraulic elevator .....	May 7, 1878	297	85	13	861
201, 584	Wynkoop, Jacob, and Joel Y. Bloomingdale, New Salem, N. Y. Bale-tie .....	May 28, 1878	1277	364	13	1005
	Wynkoop, Legrand D., Owasso, Mich. Turbine water-wheel .....	Mar. 19, 1878	802	244	13	544
208, 503	Wyscarver, James K. (See Goldman, Isaac S., assignor.) .....					
203, 885	Wysong, Charles and Frederick, Pyrmont, Ohio. Corn-planter .....	Oct. 1, 1878	48	16	14	496
203, 522	Wysong, Frederick (See Wysong, Charles and Frederick.) .....					
203, 825	Wythe, William W., Erie, Pa. Mechanism for imparting motion to speed-recorders ..	May 21, 1878	683	194	13	928
203, 522	Yahrea, John Mathias, Sharon, Pa. Fire-place .....	May 7, 1878	299	85	13	861
205, 940	Yale, Charles O., New York, N. Y. Hatchway-door mechanism .....	July 9, 1878	527	151	14	79
8, 158	Yale, Linus, jr., deceased, Silas N. Brooks, administrator and assignor to Yale Lock Manufacturing Company, Stamford, Conn. Lock .....	Apr. 2, 1878	242	70, 71	13	633
	Yale Lock Manufacturing Company. (See Little, Samuel A., assignor).... (Reissue.)					
	Same..... (See Stockwell, Emory, assignor.) .....					
	Same..... (See Towne, Henry R., assignor.) .....					
	Same..... (See Towne & Keating, assignors.) .....					
	Same..... (See Yale, Linus, jr., assignor)..... (Reissue.)					
199, 341	Yale, Robert, Afton, N. Y. Gate .....	Jan. 15, 1878	644	188	13	116
198, 911	Yarborough, William H., Sherman, Tex. Earth-boring machine .....	Jan. 1, 1878	195	55	13	38
205, 459	Yarborough, James W., Girard, La. Fence-post .....	June 25, 1878	1105	327	13	1170
205, 460	Yarborough, William T., Richmond, Va. Making plug-tobacco .....	June 25, 1878	1105	328	13	1170
207, 335	Yarrow, Alfred Fernandez, Isle of Dogs, Poplar, England. Ventilating ships .....	Aug. 20, 1878	711	212	14	303
				213		
205, 328	Yaryan, Homer T., Richmond, Ind. Apparatus for refining fat-oils .....	June 25, 1878	977	289	13	1153
205, 516	Same..... Refining fat-oils .....	July 2, 1878	55	16	14	16
202, 915	Ybarra, Luis, Madrid, Spain. Revolving fire-arm .....	Apr. 23, 1878	1151	331	13	768
205, 951	Yeager, Francis M., Oxford, Kans. Sheaf-carrier for harvesters .....	July 16, 1878	554	158	14	88
204, 410	Yeager, George, Flatonia, Tex. Cotton-worm destroyer .....	May 28, 1878	1278	364	13	1005
205, 517	Yeagley, Jacob B., Indianapolis, Ind. Sash-holder .....	July 2, 1878	56	17	14	16
199, 608	Yeiser, Edmund, Sheridan, Pa. Plow .....	Jan. 22, 1878	925	271	13	168
	Yelton, John Wheeler. (See Hodgen & Yelton)..... (Reissue.)					
210, 000	Yeoman, Edward, Chicago, Ill. Spring bed-bottom .....	Nov. 19, 1878	519	156	14	757
204, 411	Yerkes, Josiah Thomas, Stuart, Iowa. Spring-seat for vehicles .....	May 28, 1878	1278	365	13	1005
206, 206	Yerrinton, Frank M., Cambridge, Mass. Pocket-book for fishermen .....	July 23, 1878	849	242	14	128
200, 117	Yinger, Franklin S., assignor of two-thirds interest to William H. Eisenhart and Adam Hake, Mount Wolf, Pa. Lifting-jack .....	Feb. 5, 1878	229	70	13	268
198, 918	Yoe, William P., assignor to Post & Co., Cincinnati, Ohio. Padlock .....	Jan. 1, 1878	202	57	13	39
	Yokom, Wilford W. (See Parker & Yokom.) .....					
201, 081	Yonge, Robert G., assignor of one-half interest to Edward D. Coe, Saint Louis, Mo. Stove-pipe shelf .....	Mar. 5, 1878	259	81	13	454
209, 846	Yost, George W. N., New York, and Robert D. Warner, Syracuse, N. Y. Mower .....	Nov. 12, 1878	344	103	14	731
199, 771	Yost, Irvin, Thornville, Ohio. Corn-popper .....	Jan. 29, 1878	1167	325	13	205
201, 375	Youmans, George W., assignor to self and Herman F. Achauer, Zanesville, Ohio. Permutation-lock .....	Mar. 10, 1878	585	180	13	515
202, 916	Young, Alfred, Philadelphia, Pa. Tripod-head for surveying-instruments .....	Apr. 23, 1878	1152	331	13	768
199, 771	Young, Alonzo E., Boston, Mass. Door-knob extension .....	Jan. 29, 1878	1167	325	13	205
205, 941	Same..... Knob attachment .....	July 9, 1878	529	151	14	80
205, 227	Young, Andrew. (See McCarroll, William, assignor.) .....					
	Young, Benjamin F., assignor to Young & Wheeler, Boston, Mass. Tire-setting machine ..	June 25, 1878	867	256	13	1139
	chine .....			257		
209, 786	Young, Charles, assignor to Albert G. Mack, Chicago, Ill. Crocheting-machine for making looped fabrics .....	Nov. 12, 1878	278	83, 84	14	722
199, 342	Young, Charles L., Newport, Me. Axe .....	Jan. 15, 1878	645	188	13	116
200, 360	Young, Cornelius, Sandy Hill, N. Y. Suction-box for paper-making machines .....	Feb. 12, 1878	494	145	13	317
209, 003	Same..... Roll suction-box for paper-making machines .....	Oct. 15, 1878	601	175	14	580
209, 992	Young, Edward S., Westborough, Mass., and George H. Dimond, Bridgeport, Conn. Sewing-machine .....	Aug. 13, 1878	353	108	14	253
204, 872	Young, Edwin and Edward R., and Frederick E. Hafely, assignors to Pott, Young & Co., New York, N. Y. Book-holder .....	June 11, 1878	476	138	13	1078
	Young, Edwin R. (See Young & Hafely.) .....					
	Young, Frank Johnson. (See Sievert & Young.) .....					
209, 847	Young, Frederick, and Edward C. Koer, Newark, N. J. Spring-bracelet .....	Nov. 12, 1878	346	103	14	731
207, 583	Young, Frederick W., assignor to self, Joseph H. Shinn, Robert S. Catea, and Beverly Powers, Union, Oreg. Grain-separator .....	Aug. 27, 1878	1002	293	14	344
200, 593	Young, Hugh, assignor to William Radcliffe, New York, N. Y. Stone-sawing machine ..	Feb. 19, 1878	720	212	13	359
200, 594	Same..... same .....	Feb. 19, 1878	722	212	13	359
203, 521	Young, James, Waraw, Ind. Bee-hive .....	May 7, 1878	299	85	13	861
206, 384	Young, James, Kenton, Ohio. Metallic fence .....	May 28, 1878	1056	363	14	154
209, 369	Young, James, Amsterdam, N. Y. Clothes-wringer .....	Oct. 29, 1878	1016	296	14	645
	Young, John. (See Sellick & Young.) .....					
	Young, John T. (See Streilly, John, assignor.) .....					
204, 412	Young, Joseph, Clayton, Mich. Cultivator .....	May 28, 1878	1279	365	13	1005
203, 235	Young, Lemuel W., Elk City, Pa. Oil-well valve .....	Apr. 30, 1878	1484	434	13	815
198, 961	Young, Levi S., Cleveland, Ohio, and Charles C. Gale, Indianapolis, Ind. Indicator-lock .....	Jan. 8, 1878	251	72	13	54
	Young, Peter T., et al. (See Marable, Thomas Edward, assignor)..... (Reissue.)					
206, 656	Young, Wesley. (See Neil & Young.) .....					
	Young, Wesley, Columbus, Ohio. Implement for bending hedge-plants .....	July 30, 1878	1360	391	14	186
205, 599	Young & Wheeler. (See Young, Benjamin F., assignor.) .....					
	Young, William, Easton, Pa. Candlestick .....	July 2, 1878	137	41	14	27
	Young, William D. (See Justus & Young.) .....					
208, 554	Young, William D., Philadelphia, Pa. Ventilator .....	Oct. 1, 1878	96	28	14	502
	Young, William E. (See Henry, Benjamin F., assignor.) .....					
198, 962	Young, William E., assignor of one-half interest to James Early, Chicago, Ill. Watchman's time-check .....	Jan. 8, 1878	252	72	13	54

*Alphabetical list of patentees for the year 1878—Continued.*

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
	Younger, William. ( <i>See</i> Keim, Simon J., assignor.)					
206, 993	Youngs, Eugene D., Orangeville Mills, Mich. Fence.	Aug. 13, 1878	354	108	14	254
209, 370	Youngs, Quinten M., and Alfred E. Mathews, Utica, N. Y. Shoe-button.	Oct. 29, 1878	1017	295	14	645
199, 949	Youngs, William H. H., Waverly, Iowa. Fence-post.	Feb. 5, 1878	61	20	13	242
206, 849	Yount, Andrew, Kokomo, Ind. Governor for steam-engine.	Aug. 6, 1878	201	64	14	231
	Yourtee, Samuel L. ( <i>See</i> Nelson, Michael D., assignor.)					
	Same. ( <i>See</i> Devore & Yourtee.)					
200, 118	Yule, George, Newark, N. J. Machine for pouncing hats.	Feb. 5, 1878	229	70	13	268
201, 595	Yung Chow, San Francisco, Cal. Pocket.	Mar. 26, 1878	827	252	13	532
203, 714	Yunginger, Friedrich, Baltimore, Md. Meat-can.	July 2, 1878	267	79	14	42
202, 087	Zachringer, William, New Orleans, La. Billiard-chalk holder.	Apr. 2, 1878	227	66	13	631
210, 230	Same. Fare-box.	Nov. 26, 1878	774	230	14	795
	Zahn, Edward J. ( <i>See</i> Ball, George S., assignor.)					
207, 233	Zahn, Simon S., Huntington, Ind. Churning apparatus.	Aug. 20, 1878	610	183	14	289
203, 979	Zangerle, Joseph, Chicago, Ill. Rocking-chair attachment.	May 21, 1878	803	231	13	941
199, 950	Zapfe, François Charles, New York, N. Y. Fire-extinguisher.	Feb. 5, 1878	61	20	13	242
209, 440	Zarley, John Harrison, Oakland, Ill. Corn-planter.	Oct. 29, 1878	1086	316	14	656
	Zeidler, Carl. ( <i>See</i> Illingworth & Zeidler.)					
202, 502	Zeller, Melancthon E., Bluffton, Ohio. Trace-carrier.	Apr. 16, 1878	681	200	13	704
207, 791	Same. Harness-trimming.	Sept. 3, 1878	209	64	14	375
207, 093	Zeltner, Johann, Nuremberg, Bavaria. Manufacture of red ultramarine.	Aug. 13, 1878	453	138	14	265
207, 836	Same. Manufacture of violet ultramarine.	Sept. 10, 1878	269	14	13	386
202, 210	Zerban, Andrew, New York, N. Y. Sample-card.	Apr. 9, 1878	372	109	13	656
206, 064	Same. Sampling colors for patterns.	July 16, 1878	608	193	14	102
200, 812	Zetti, Ignaz, Cincinnati, Ohio. Automatic fan.	Feb. 26, 1878	960	283	13	404
200, 370	Ziegenhagen, August, Chicago, Ill. Fire-escape.	Feb. 12, 1878	495	145	13	317
210, 072	Ziegler, G. Frederick, Jersey City, N. J., assignor to Dora Hagedorn, New Brighton, N. Y. Boot and shoe cleaner.	Nov. 19, 1878	595	117	14	767
200, 639	Ziegler, George W., Butler, Pa. Valve-gear for steam-engines.	Feb. 26, 1878	786	231	13	378
203, 309	Ziegler, Henry S., Philadelphia, Pa. Stove-polishing compound.	May 7, 1878	80	13	13	831
	Ziegler, John Q. A. ( <i>See</i> Kain, William H., assignor.)					
208, 875	Zierleyn, Antoni, Grand Rapids, Mich. Brooch-fastening.	Oct. 8, 1878	455	131	14	557
203, 866	Zimmer, David, Zanesville, Ohio. Combined paper-weight and copy-holder.	May 21, 1878	683	194	13	926
208, 663	Zimmer, George Ludwig, Frankford-on-the-Main, Germany. Belt-fastener.	Oct. 1, 1878	214	61	14	517
203, 099	Zimmerer, Anton, Nebraska City, Nebr. Fence.	Apr. 30, 1878	1339	390	13	797
199, 343	Zimmerman, Arnold W., Dayton, Ohio, assignor to self, Charles W. Miles, Milford, Conn., and Samuel Pillsbury, New York, N. Y. Refrigerator-car.	Jan. 15, 1878	646	189	13	116
8, 339	Zimmerman, Joseph W., Manistee, Mich. Friction feed-clutch for circular-saw mills. (Reissue.)	July 16, 1878	786	225	14	116
	Zimmerman, Lewis. ( <i>See</i> Beatty & Zimmerman.)					
202, 503	Zimmerman, Michael S., Indian Spring District, Mo. Fence.	Apr. 16, 1878	681	200	13	704
205, 166	Zimmermann, John Franklin, New Castle, Mo. Sash-fastener. (Reissue.)	June 18, 1878	788	234	13	1124
	Zinn & Messer. ( <i>See</i> Messer, Louis, assignor.)					
209, 441	Zinn, William H., Boston, Mass. Watch-winding device.	Oct. 29, 1878	1087	316	14	656
209, 314	Zinsser, August, New York, N. Y. Refrigerator.	Oct. 22, 1878	943	14	13	631
	Zipfel, Barnhard. ( <i>See</i> Clouse & Zipfel.)					
204, 937	Zoehl, Johan A., Milwaukee, Wis. Sled-propeller.	June 18, 1878	562	164	13	1093
208, 876	Same. Velocipede-propeller.	Oct. 8, 1878	456	132	14	557
209, 848	Zoepfel, Ernst H., New York, N. Y. Jewel-box.	Nov. 12, 1878	346	104	14	731
201, 974	Zogbaum, Ferdinand, New York, N. Y. Key for accordions.	Apr. 2, 1878	111	33	13	615
210, 590	Zoller, Albert, Hoboken, N. J. Bung for casks.	Dec. 3, 1878	220	582	14	852
208, 701	Zschech, Gustavus H., Indianapolis, Ind. Feed-water heater, &c.	Oct. 8, 1878	263	75	14	532
205, 461	Zuckschwerdt, George, New York, N. Y. Toy.	June 25, 1878	1107	328	13	1170
	Zwicker, Jacob, <i>et al.</i> ( <i>See</i> Hübel, Henry, assignor.)					
	Zwiebel, Anton. ( <i>See</i> Olin, Zwiebel & Bennett.)					
205, 780	Zwiebel, Anton, Burlington, Wis. Wind-engine.	July 9, 1878	355	102	14	57
208, 453	Same. Wind-wheel.	Sept. 24, 1878	952	279	14	482
203, 310	Zwietusch, Otto, Milwaukee, Wis. Carbonic-acid-gas generator.	May 7, 1878	80	24	13	831

## ALPHABETICAL LIST OF PATENTEES OF DESIGNS.

No.	Name, residence, and design.	Date.	Official Gazette.	
			Vol.	Page.
10, 847	Ackerman, Emma M., Boston, Mass. Crocheted hood .....	Oct. 1, 1878	14	488
	Aiken, Lambert & Co. (See Gessner, Charles W., assignor.) .....			
10, 714	Allan, Robert, assignor to Alexander Smith & Sons Carpet Company, Yonkers, N. Y. Carpets ..	June 11, 1878	13	1048
10, 846	Same..... Carpeting .....	Oct. 1, 1878	14	488
10, 398	Allen, Frank E., Yonkers, N. Y. Carpets .....	Jan. 15, 1878	13	11
10, 443	Allen, Robert, assignor to Alexander Smith & Sons Carpet Company, Yonkers, N. Y. Carpets ..	Feb. 12, 1878	13	278
10, 444	Same..... same.....	Feb. 12, 1878	13	278
10, 797	Appleton, Robert M., Lake Village, N. H. Stocking .....	Sept. 10, 1878	14	380
10, 705	Archer, George W., Rochester, N. Y. Piano-stool legs .....	June 4, 1878	13	1012
10, 643	Atterbury, Thomas B., Pittsburg, Pa. Glassware .....	Apr. 23, 1878	13	730
10, 407	Atwater, Richard M., Millville, N. J., assignor to James Whitall, Philadelphia, and R. Pearsall Smith, John Mickle, jr., Charles Roberts, Charles A. Tatum, and William H. Nicholson, New York. Bottle .....	Jan. 22, 1878	13	126
10, 625	Ayer, George, assignor to Seth Thomas Clock Company, New York, N. Y. Clock-face .....	Apr. 16, 1878	13	678
10, 706	Baggs, Andrew H., Bridgeport, Ohio. Pressed-glass table-set .....	June 4, 1878	13	1012
10, 897	Bainbridge, Henry C., Brooklyn, N. Y. Writing-paper .....	Nov. 12, 1878	14	716
10, 856	Banigan, Joseph, Providence, R. I. Rubber boots .....	Oct. 1, 1878	14	488
10, 399	Barclay, Hugh, assignor to James H. Gay, Philadelphia, Pa. Carpets .....	Jan. 15, 1878	13	11
10, 825	Barclay, Arnold, New York, N. Y. Vest .....	Sept. 10, 1878	14	380
10, 513	Barkentin, George S., assignor to E. Miller & Co., Meriden, Conn. Statuette .....	Mar. 12, 1878	13	458
10, 500	Barker, William, West Troy, N. Y. Cuff .....	Feb. 26, 1878	13	370
10, 638	Barlow, James, and James Moses, Trenton, N. J. Handles for covered dishes .....	Mar. 19, 1878	13	501
10, 893	Bartholdi, August, Paris, France. Bust .....	Nov. 5, 1878	14	680
10, 505	Bartlett, Truman H., Boston, Mass., assignor to Edward Miller & Co., West Meriden, Conn. Stat- uette .....	Mar. 5, 1878	13	410
	Bawden, John, et al. (See Read, Joseph A., assignor.) .....			
10, 619	Beam, Daniel A., Newark, N. J., assignor to Wheeler, Parsons & Hayes, New York, N. Y. Orna- mental chain .....	Apr. 9, 1878	13	638
10, 841	Beam, Daniel A., Newark, N. J. Ornamental chain .....	Sept. 24, 1878	14	450
10, 615	Beattie, William C., assignor to Reed & Barton, Taunton, Mass. Handles for forks, spoons, knives, &c .....	Apr. 2, 1878	13	598
10, 884	Same..... Coffin-plates .....	Oct. 29, 1878	14	636
	Beckind, Walter. (See Stockhausen & Beckind.) .....			
10, 532	Beebe, Calvin T., Jackson, Mich. Shovel-handles .....	Mar. 12, 1878	13	458
10, 854	Belmont, Sigmund, New Orleans, La. Cigar-boxes .....	Oct. 1, 1878	14	488
10, 855	Same..... same.....	Oct. 1, 1878	14	488
10, 852	Bennett, Allan T., Chicago, Ill. Stoves .....	Oct. 1, 1878	14	488
10, 434	Benton, Arthur H., Minneapolis, Minn. Lamp .....	Feb. 5, 1878	13	232
	Bigelow Carpet Company. (See Christie, Hugh, assignor.) .....			
	Same..... (See Magee, Charles, assignor.) .....			
	Same..... (See Magee, John, assignor.) .....			
	Same..... (See McCallum, William, assignor.) .....			
	Same..... (See Neil, John, assignor.) .....			
	Same..... (See Pyne, Edmund, assignor.) .....			
10, 684	Bissell, Frank S., Pittsburg, Pa. Parlor-stoves .....	May 21, 1878	13	918
	Blabon, George C., et al. (See Plock, Franz, assignor.) .....			
10, 405	Blaesus, Emile V., New York, N. Y. Mirror-frame .....	Jan. 15, 1878	13	11
10, 743	Blair, George W., Pittsburg, Pa. Glassware .....	July 9, 1878	14	48
10, 792	Blake, Rufus W., assignor to Charles A. Sterling Organ Company, Derby, Conn. Organ-case ..	Sept. 3, 1878	14	348
10, 390	Bourn, Augustus O., Bristol, R. I. Rubber fabric .....	Jan. 8, 1878	13	48
10, 692	Bosworth, Frederick S., assignor to Weybosset Mills, Providence, R. I. Fancy cassimere .....	May 28, 1878	13	970
10, 693	Same..... same.....	May 28, 1878	13	970
10, 694	Same..... same.....	May 28, 1878	13	970
10, 695	Same..... same.....	May 28, 1878	13	970
10, 696	Same..... same.....	May 28, 1878	13	970
10, 697	Same..... same.....	May 28, 1878	13	970
10, 698	Same..... same.....	May 28, 1878	13	970
10, 699	Same..... same.....	May 28, 1878	13	970
10, 700	Same..... same.....	May 28, 1878	13	970
10, 701	Same..... same.....	May 28, 1878	13	970
10, 702	Same..... same.....	May 28, 1878	13	970
	Bradley & Hubbard Manufacturing Company. (See Bradley, Nathaniel L., assignor.) .....			
	Same..... (See Patitz, Albert, assignor.) .....			
	Same..... (See Seidensticker, Frederick R., assignor.) .....			
10, 742	Bradley, Nathaniel L., assignor to Bradley & Hubbard Manufacturing Company. Clock-case .....	July 9, 1878	14	48
10, 652	Briggs, George D., assignor to William C. Greene & Co., Providence, R. I. Breastpin .....	Apr. 30, 1878	13	774
10, 391	Britner, George C., Brooklyn, N. Y. Buttons .....	Jan. 8, 1878	13	48
	Brittin, Edwin L. (See Gill & Brittin.) .....			
10, 620	Britton, William, assignor to John T. Mauran, Providence, R. I. Breastpin .....	Apr. 9, 1878	13	638
	Bromley & Sons, John. (See Bromley, John H., assignor.) .....			
10, 710	Bromley, John H., assignor to John Bromley & Sons, Philadelphia, Pa. Carpet .....	June 4, 1878	13	1012
	Brown, Joseph A. (See Fuller & Brown.) .....			
10, 744	Brownell, Andrew S., Watertown, Mass. Car-basket .....	July 9, 1878	14	48
	Bruce, David Wolfe. (See Herriet & Bruce.) .....			
	Same..... (See Herriet, Julius, assignor.) .....			
10, 777	Bruce, David Wolfe, New York, N. Y. Font of ornamental printing-types .....	Aug. 13, 1878	14	226
10, 677	Bryon, William, New York, N. Y. Bracelet .....	May 14, 1878	13	872
10, 501	Burgess, John W., East Orange, N. J. Dish-handles .....	Feb. 26, 1878	13	370
10, 626	Burnham, Caroline A., West Somerville, assignor to Edwin J. Lane, Boston, Mass. Crochet fabric ..	Apr. 16, 1878	13	678
10, 760	Burnham, Caroline A., West Somerville, assignor to Thomas Dalby and Edwin J. Lane, Boston, Mass. Crochet stitch .....	July 30, 1878	14	160
10, 424	Burrows, William, Brooklyn, assignor to J. L. Mott Iron Works, New York, N. Y. Fire-place heaters ..	Jan. 29, 1878	13	179
10, 549	Same..... Stoves and ranges .....	Mar. 19, 1878	13	558
10, 497	Burton, George D., New Ipswich, N. H. Street or park lamp .....	Feb. 19, 1878	13	320
10, 612	Byron, William, assignor to Vulcanite Jewelry Company, New York, N. Y. Bracelet .....	Apr. 2, 1878	13	596



*Alphabetical list of patentees of designs for the year 1878—Continued.*

No.	Name, residence, and design.	Date.	Official Gazette.	
			Vol.	Page.
10, 715	Camp, Nelson H., West Meriden, assignor to Charles Parker Company, Meriden, Conn. Hinges...	June 11, 1878	13	1048
	Campbell, Jones & Co. (See Franz, Henry, assignor.)			
	Candee & Co., L. (See Watkinson, George, assignor.)			
10, 613	Carpenter, Francis, Burrillville, R. I. Cassimeres.....	Apr. 2, 1878	13	598
10, 965	Carter, John V. B., assignor to Myers, Osborn & Co., Cleveland, Ohio. Cooking-stoves.....	Dec. 17, 1878	14	904
10, 923	Castle, Chauncey H., assignor to Comstock, Castle & Co., Quincy, Ill. Heating-stoves.....	Nov. 26, 1878	14	788
	Charles Parker Company. (See Camp, Nelson H., assignor.)			
10, 778	Chicago Stamping Company. (See Morgan, Elisha, jr., assignor.)			
	Christie, Hugh, New York, N. Y., assignor to Bigelow Carpet Company, Clinton, Mass. Carpet....	Aug. 13, 1878	14	256
	Cincinnati Type Foundry Company. (See Reuter, Conrad, assignor.)			
10, 864	Clark, Charles B., Buffalo, N. Y. Hinges.....	Oct. 8, 1878	14	526
10, 880	Clark, James M., Jersey City, N. J. Pencil-cases.....	Oct. 29, 1878	14	636
10, 413	Clark, Samuel, Brooklyn, N. Y. Inkstands.....	Jan. 29, 1878	13	179
10, 826	Cochrane, John, jr., Malden, Mass. Pattern for ornamenting fabrics.....	Sept. 10, 1878	14	380
10, 848	Codding, Arthur E., Attleborough, Mass. Ornamental trimming for jewelry.....	Oct. 1, 1878	14	488
10, 637	Collender, Hugh W., New York, N. Y. Billiard-table leg.....	Apr. 16, 1878	13	678
	Combs, Gilbert, et al. (See Read, Joseph A., assignor.)			
	Comstock, Castle & Co. (See Castle, Chauncey H., assignor.)			
	Same..... (See Vedder & Heister, assignors.)			
10, 921	Connell, John P., Kensington, Conn. Hand-bells.....	Nov. 26, 1878	14	788
10, 450	Connor, James M., Greenville, N. J. Font of printing-types.....	Feb. 19, 1878	13	326
10, 665	Same..... same.....	May 7, 1878	13	820
10, 681	Same..... same.....	May 14, 1878	13	872
10, 685	Same..... same.....	May 21, 1878	13	918
10, 868	Same..... same.....	Oct. 15, 1878	14	562
	Conner's Sons, James. (See Ehlert, Heinrich, assignor.)			
	Cornwall, Horace. (See Hammond, Henry, assignor.)			
	Crane, Breed & Co. (See Crane, Martin H., assignor.)			
	Same..... (See McComas, William R., assignor.)			
	Same..... (See McFarlan, Charles E., assignor.)			
10, 704	Crane, Frederick, Bloomfield, N. J. Buckle.....	May 28, 1878	13	970
10, 909	Crane, Martin H., assignor to Crane, Breed & Co., Cincinnati, Ohio. Coffin-handles.....	Nov. 19, 1878	14	750
10, 922	Same..... Radiator-bases.....	Nov. 26, 1878	14	788
	Crease, Orlando, et al. (See Heald, Alfred, assignor.)			
10, 785	Crossley, John, Heywood, Great Britain. Toilet-cover, counterpane, &c.....	Aug. 28, 1878	14	272
10, 539	Culbert, Archibald, New York, N. Y. Hinges.....	Mar. 19, 1878	13	501
10, 559	Culver, John M., assignor to Hall, Elton & Co., Wallingford, Conn. Spoons.....	Oct. 8, 1878	14	526
10, 860	Same..... same.....	Oct. 8, 1878	14	526
10, 725	Cussen, William J., Richmond, Va. Tobacco-bags.....	June 18, 1878	13	1084
10, 726	Same..... same.....	June 18, 1878	13	1084
	Dalby, Thomas, et al. (See Burnham, Caroline A., assignor.)			
10, 400	Daniel, Eugène, Paris, France, assignor to Roxbury Carpet Company, Boston, Mass. Carpets.....	Jan. 15, 1878	13	11
10, 412	Darling, George S., Chicago, Ill. Foot-piece for treadles.....	Jan. 22, 1878	13	126
10, 704	Darling, George S., assignor to Wilson Sewing Machine Company, Chicago, Ill. Sewing-machine bracket arm.....	Aug. 6, 1878	14	206
10, 689	Davies, Henry J., Brooklyn, N. Y. Clock-case.....	May 21, 1878	13	918
10, 644	Davis, James H., Ypsilanti, Mich. Match-safe.....	Apr. 23, 1878	13	730
	Davis, John C. S., et al. (See Plock, Franz, assignor.)			
10, 853	Davis, Theodore R., Rahway, N. J., assignor to Wolcott A. Hull. Chandeliers.....	Oct. 1, 1878	14	488
10, 936	Dawson, John, Williamsburg, N. Y. Bedsteads.....	Dec. 3, 1878	14	824
10, 451	De Hart, William, assignor to Stephen Sandford, Amsterdam, N. Y. Carpets.....	Feb. 19, 1878	13	326
10, 943	Dillie, French M., Cincinnati, Ohio. Covers for bibles.....	Dec. 3, 1878	14	824
10, 865	Draper, Frank S., Attleborough, Mass. Watch-chain bar.....	Oct. 8, 1878	14	526
10, 896	Draper, George H., Attleborough, Mass. Ornament for jewelry.....	Nov. 5, 1878	14	680
10, 745	Ehlert, Heinrich, Berlin, Prussia, assignor to James Conner's Sons, New York, N. Y. Font of printing-types.....	July 9, 1878	14	48
10, 757	Emerson, James F., Wakefield, Mass. Shoes.....	July 23, 1878	14	120
	Estey & Co., J. (See Hayward, Samuel, assignor.)			
10, 732	Faas, Charles A., Wrentham, Mass. Gem-setting.....	June 25, 1878	13	1130
10, 540	Fallows, James, assignor to F. Gutekunst, Philadelphia, Pa. Badge.....	Mar. 19, 1878	13	501
10, 890	Fatoux, Alexis, assignor to Reed & Barton, Taunton, Mass. Coffin-plate.....	Oct. 29, 1878	14	636
10, 801	Same..... same.....	Oct. 29, 1878	14	636
10, 892	Same..... same.....	Oct. 29, 1878	14	636
10, 468	Fisher, Edwin, New York, N. Y., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpets.....	Feb. 19, 1878	13	326
10, 469	Same..... same.....	Feb. 19, 1878	13	326
10, 470	Same..... same.....	Feb. 19, 1878	13	326
10, 471	Same..... same.....	Feb. 19, 1878	13	326
10, 472	Same..... same.....	Feb. 19, 1878	13	326
10, 473	Same..... same.....	Feb. 19, 1878	13	326
10, 452	Fisher, John, New York, N. Y., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpets.....	Feb. 19, 1878	13	326
10, 453	Same..... same.....	Feb. 19, 1878	13	326
10, 454	Same..... same.....	Feb. 19, 1878	13	326
10, 455	Same..... same.....	Feb. 19, 1878	13	326
10, 456	Same..... same.....	Feb. 19, 1878	13	326
10, 457	Same..... same.....	Feb. 19, 1878	13	326
10, 458	Same..... same.....	Feb. 19, 1878	13	326
10, 459	Same..... same.....	Feb. 19, 1878	13	326
10, 460	Same..... same.....	Feb. 19, 1878	13	326
10, 461	Same..... same.....	Feb. 19, 1878	13	326
10, 462	Same..... same.....	Feb. 19, 1878	13	326
10, 463	Same..... same.....	Feb. 19, 1878	13	326
10, 464	Same..... same.....	Feb. 19, 1878	13	326
10, 465	Same..... same.....	Feb. 19, 1878	13	326
10, 466	Same..... same.....	Feb. 19, 1878	13	326
10, 467	Same..... same.....	Feb. 19, 1878	13	326
10, 506	Fisk, Henry G., New York, N. Y. Scarf.....	Mar. 5, 1878	13	410
10, 397	Fogelstrand, Otto F., New Britain, assignor to Hart, Bliven & Mead Manufacturing Company, Kensington, Conn. Inkstands.....	Jan. 8, 1878	13	48
10, 793	Fogelstrand, Otto F., New York, N. Y., assignor to Hart, Bliven & Mead Manufacturing Company, Kensington, Conn. Inkstands.....	Sept. 3, 1878	14	348
10, 550	Folsom, James L., Brooklyn, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpets.....	Mar. 26, 1878	13	550
10, 551	Same..... same.....	Mar. 26, 1878	13	550

*Alphabetical list of patentees of designs for the year 1878—Continued.*

No.	Name, residence, and design.	Date.	Official Gazette.	
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10, 552	Folsom, James L., Brooklyn, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpets	Mar. 26, 1878	13	550
10, 553	Same.....same	Mar. 26, 1878	13	550
10, 554	Same.....same	Mar. 26, 1878	13	550
10, 555	Same.....same	Mar. 26, 1878	13	550
10, 556	Same.....same	Mar. 26, 1878	13	550
10, 557	Same.....same	Mar. 26, 1878	13	550
10, 558	Same.....same	Mar. 26, 1878	13	550
10, 559	Same.....same	Mar. 26, 1878	13	550
10, 560	Same.....same	Mar. 26, 1878	13	550
10, 561	Same.....same	Mar. 26, 1878	13	550
10, 562	Same.....same	Mar. 26, 1878	13	550
10, 563	Same.....same	Mar. 26, 1878	13	550
10, 564	Same.....same	Mar. 26, 1878	13	550
10, 565	Same.....same	Mar. 26, 1878	13	550
10, 566	Same.....same	Mar. 26, 1878	13	550
10, 567	Same.....same	Mar. 26, 1878	13	550
10, 568	Same.....same	Mar. 26, 1878	13	550
10, 569	Same.....same	Mar. 26, 1878	13	550
10, 570	Same.....same	Mar. 26, 1878	13	550
10, 571	Same.....same	Mar. 26, 1878	13	550
10, 572	Same.....same	Mar. 26, 1878	13	550
10, 573	Same.....same	Mar. 26, 1878	13	550
10, 574	Same.....same	Mar. 26, 1878	13	550
10, 575	Same.....same	Mar. 26, 1878	13	550
10, 576	Same.....same	Mar. 26, 1878	13	550
10, 798	Same.....same	Sept. 10, 1878	14	380
10, 799	Same.....same	Sept. 10, 1878	14	380
10, 800	Same.....same	Sept. 10, 1878	14	380
10, 801	Same.....same	Sept. 10, 1878	14	380
10, 802	Same.....same	Sept. 10, 1878	14	380
10, 803	Same.....same	Sept. 10, 1878	14	380
10, 804	Same.....same	Sept. 10, 1878	14	380
10, 858	Fowler, Charles S., Brooklyn, and Lucius A. Rockwell, New York, N. Y. Crackers	Aug. 6, 1878	14	266
10, 414	Fowler, Samuel W., assignor to F. H. Lovell & Co., New York, N. Y. Lamp-chimney	Jan. 29, 1878	13	179
10, 731	Franz, Henry, assignor to Campbell, Jones & Co., Pittsburg, Pa. Glassware	June 25, 1878	13	1130
10, 887	Same.....Ornamentation of glassware	Oct. 29, 1878	14	636
10, 857	Frisbie, Henry R., Bridgeport, assignor to E. N. Welch Manufacturing Company, Forestville, Conn. Clock-fronts	Oct. 1, 1878	14	483
10, 858	Same.....same	Oct. 1, 1878	14	483
10, 924	Fuchs, Eugene A., assignor to C. and G. Spoerl, Brooklyn, N. Y. Rocking-chairs	Nov. 26, 1878	14	788
10, 707	Fuller, Nathaniel, and Joseph A. Brown, Boston, Mass. Wooden cigar-lighter	June 4, 1878	13	1012
10, 805	Galashan, Henry, Philadelphia, Pa. Skirt	Sept. 10, 1878	14	380
10, 709	Gay, James H. (See Barclay, Hugh, assignor.)	June 4, 1878	13	1012
10, 709	Geistadt, Léon, Paris, France. Bottles	Oct. 22, 1878	14	602
10, 765	Gerard, John, assignor to Trenton Lock and Hardware Company, Trenton, N. J. Padlocks	Nov. 19, 1878	14	750
10, 913	Same.....same	Oct. 22, 1878	14	602
10, 872	Gessner, Charles W., assignor to Aiken, Lambert & Co., New York, N. Y. Pencil-cases	Apr. 9, 1878	13	638
10, 622	Giesecke, George, Leipzig, Saxony, Germany. Font of printing-types	Mar. 26, 1878	13	550
10, 609	Gill, George, and Edwin L. Brittin, Derby, Conn. Handles for spoons, forks, &c	July 23, 1878	14	120
10, 758	Goodall, Thomas, Sanford, Me. Plush or other goods	July 23, 1878	14	120
10, 759	Same.....same	July 23, 1878	14	120
10, 415	Gorham Manufacturing Company. (See Wilkinson, George, assignor.)	Jan. 29, 1878	13	179
10, 416	Graef, Charles H., Edgewater, N. Y. Bracelet	Jan. 29, 1878	13	179
10, 787	Same.....same	Aug. 27, 1878	14	310
10, 507	Gravelly, Peyton B., and Robert W. Lawson, Danville, Va. Plug-tobacco	Mar. 5, 1878	13	410
10, 720	Gray, Lawrence N. B., Boston, Mass. Wall-pocket	June 11, 1878	13	1048
10, 898	Greasly, Edmund, Philadelphia, Pa. Fringe	Nov. 12, 1878	14	716
10, 645	Greene & Co., William C. (See Briggs, George D., assignor.)	Apr. 23, 1878	13	730
10, 703	Grey, Paul, Chicago, Ill. Font of printing-type	May 28, 1878	13	970
10, 866	Griffith, Henry, Brooklyn, N. Y. Scarf-pin	Oct. 15, 1878	14	562
10, 867	Grimshaw, John, Paterson, N. J. Handkerchief	Oct. 15, 1878	14	562
10, 944	Same.....same	Dec. 3, 1878	14	824
10, 498	Same.....Handkerchief-border	Feb. 19, 1878	13	326
10, 514	Guild, George M., Boston, Mass. Cases of upright pianos	Mar. 12, 1878	13	458
10, 606	Guiraud, Etienne, New York, assignor to William B. Kindall, Brooklyn, N. Y. Carpets	May 7, 1878	13	820
10, 654	Guireau, Etienne, New York, N. Y. Carpets			
10, 656	Gulf City Foundry Company. (See Vaillant, Charles R., assignor.)			
10, 621	Gutekunst, F. (See Fallows, James, assignor.)			
10, 646	Hall, Elton & Co. (See Culver, John M., assignor.)			
10, 654	Hammarth, Jacob, assignor to Wallace Brothers, Wallingford, Conn. Spoons	Apr. 30, 1878	13	774
10, 636	Hammond, Henry, assignor to Horace Cornwall, Hartford, Conn. Hammers	Apr. 30, 1878	13	774
10, 621	Harrington, Gilbert H., and William A. Richardson, Worcester, Mass. Pistol-handles	Apr. 9, 1878	13	638
10, 717	Same.....same	Apr. 23, 1878	13	730
10, 717	Hart, Bliven & Mead Manufacturing Company. (See Fogelstrand, Otto F., assignor.)	June 11, 1878	13	1048
10, 717	Hart, Edwin, Cleveland, Ohio. Furniture-drawers			
10, 717	Hartford Carpet Company. (See Folsom, James L., assignor.)			
10, 766	Same.....(See Heinigke, Otto, assignor.)			
10, 873	Same.....(See Horan, Henry, assignor.)			
10, 635	Same.....(See Nordmann, Henry, assignor.)			
10, 735	Same.....(See Piggott, George W., assignor.)			
10, 736	Same.....(See Rollings, John E., assignor.)			
10, 737	Same.....(See Smith, John H., assignor.)			
10, 642	Same.....(See Smith, William H., assignor.)			
10, 873	Harwood, Grove M., Troy, and Robert Wood, assignors to Henry I. Seymour Chair Manufactory, West Troy, N. Y. Chairs	Aug. 6, 1878	14	206
10, 873	Hautsche, Emil, New York, N. Y. Cigar-box	Oct. 22, 1878	14	602
10, 735	Hayward, Samuel, Boston, Mass., assignor to J. Estey & Co., Brattleborough, Vt. Organ-case	Apr. 16, 1878	13	878
10, 736	Heald, Alfred, assignor to Hugh McCallum, Orlando Crease, Andrew J. Sloan, and William McCallum, Philadelphia, Pa. Carpets	July 2, 1878	14	8
10, 736	Same.....same	July 2, 1878	14	8
10, 737	Same.....same	July 2, 1878	14	8
10, 642	Hedstrom, John A., New York, N. Y. Bracelet	Apr. 16, 1878	13	678

## Alphabetical list of patentees of designs for the year 1878—Continued.

No.	Name, residence, and design.	Date.	Official Gazette.	
			Vol.	Page.
10, 577	Heinigke, Otto, New Utrecht, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpets	Mar. 26, 1878	13	550
10, 578	Same. .... same	Mar. 26, 1878	13	550
10, 579	Same. .... same	Mar. 26, 1878	13	550
10, 580	Same. .... same	Mar. 26, 1878	13	550
10, 581	Same. .... same	Mar. 26, 1878	13	550
10, 582	Same. .... same	Mar. 26, 1878	13	550
10, 806	Same. .... same	Sept. 10, 1878	14	380
10, 807	Same. .... same	Sept. 10, 1878	14	380
10, 808	Same. .... same	Sept. 10, 1878	14	380
10, 809	Same. .... same	Sept. 10, 1878	14	380
10, 810	Same. .... same	Sept. 10, 1878	14	380
10, 811	Same. .... same	Sept. 10, 1878	14	380
10, 812	Same. .... same	Sept. 10, 1878	14	380
	Heister, Tobias S. (See Vedder & Heister.)			
	Same. .... (See Vedder, Ritchie & Heister.)			
	Hemingray Glass Company. (See Hemingray, Robert, assignor.)			
10, 678	Hemingray, Robert, Covington, Ky., assignor to Hemingray Glass Company, Cincinnati, Ohio. Lamp-shades	May 14, 1878	13	872
10, 754	Heritage, Charles, Warren, Mass. Fabrics	July 16, 1878	14	86
10, 767	Heriet, Julius, assignor to David Wolfe Bruce, New York, N. Y. Fonts of ornamental printing-types	Aug. 6, 1878	14	206
10, 768	Same. .... same	Aug. 6, 1878	14	206
10, 769	Same. .... same	Aug. 6, 1878	14	206
10, 971	Same. .... same	Dec. 17, 1878	14	904
10, 401	Heyden, Nehemiah, Essex, Conn. Lifting-handle	Jan. 15, 1878	13	11
10, 653	Heysinger, Isaac W., Philadelphia, Pa. Fountain-pen cases	Apr. 30, 1878	13	774
10, 788	Hirschfeld, Henry W., assignor to Meriden Britannia Company, West Meriden, Conn. Spoons	Aug. 27, 1878	14	310
10, 392	Hobbs, John H., Wheeling, W. Va. Glassware	Jan. 8, 1878	13	48
10, 502	Same. .... Glass shades	Feb. 26, 1878	13	370
10, 533	Hoffmann, Henry J., assignor to Thomas Potter, Sons & Co., Philadelphia, Pa. Oil-cloths	Mar. 12, 1878	13	458
10, 534	Same. .... same	Mar. 12, 1878	13	458
10, 879	Hollely, Joseph, Brooklyn, N. Y. Molded cards	Oct. 22, 1878	14	602
10, 638	Holly, Henry H., New York, N. Y. Billiard-table leg	Apr. 16, 1878	13	678
10, 445	Holmes, John, Boston, Mass. Sleeveless crocheted jacket	Feb. 12, 1878	13	278
10, 937	Same. .... Crocheted jacket	Dec. 3, 1878	14	824
10, 973	Same. .... Sleeveless crocheted jacket	Dec. 17, 1878	14	904
10, 716	Hood, Martin C., Boston, Mass. Perfumery-bottles	June 11, 1878	13	1048
10, 499	Hope, John, Providence, R. I. Shirt-front	Feb. 19, 1878	13	326
10, 386	Hopkins, Timothy E., West Fitchburg, Mass. Cassimere	Jan. 1, 1878	13	7
10, 583	Horan, Henry, East Orange, N. J., assignor to Hartford Carpet Company, Hartford, Conn. Carpets	Mar. 26, 1878	13	550
10, 584	Same. .... same	Mar. 26, 1878	13	550
10, 585	Same. .... same	Mar. 26, 1878	13	550
10, 586	Same. .... same	Mar. 26, 1878	13	550
10, 587	Same. .... same	Mar. 26, 1878	13	550
10, 588	Same. .... same	Mar. 26, 1878	13	550
10, 589	Same. .... same	Mar. 26, 1878	13	550
10, 590	Same. .... same	Mar. 26, 1878	13	550
10, 591	Same. .... same	Mar. 26, 1878	13	550
10, 592	Same. .... same	Mar. 26, 1878	13	550
10, 610	Same. .... same	Mar. 26, 1878	13	550
10, 813	Same. .... same	Sept. 10, 1878	14	380
10, 814	Same. .... same	Sept. 10, 1878	14	380
10, 815	Same. .... same	Sept. 10, 1878	14	380
10, 816	Same. .... same	Sept. 10, 1878	14	380
10, 817	Same. .... same	Sept. 10, 1878	14	380
10, 818	Same. .... same	Sept. 10, 1878	14	380
	Howard & Co., James L. (See Howard, James L., assignor.)			
10, 842	Howard, Hiram, New York, N. Y. Brooch	Sept. 24, 1878	14	450
10, 914	Same. .... same	Nov. 10, 1878	14	750
10, 925	Howard, James L., assignor to James L. Howard & Co., Hartford, Conn. Sash and blind trimmings	Nov. 26, 1878	14	788
10, 926	Same. .... Blind-lifts	Nov. 26, 1878	14	788
10, 958	Howard, Stephen C., New York, N. Y. Brooch	Dec. 10, 1878	14	862
10, 627	Hoyt, George, Thomaston, Conn., assignor to Seth Thomas Clock Company, New York, N. Y. Pendulum-weight	Apr. 16, 1878	13	678
	Huggins, James S. (See Rogers & Huggins.)			
10, 878	Hull, Gurdon W., assignor to Simpson, Hall, Miller & Co., Wallingford, Conn. Spoon and fork handles	Oct. 22, 1878	14	602
	Hull, Wolcott A. (See Davis, Theodore R., assignor.)			
10, 655	Hull, Wolcott A., New York, N. Y. Inkstand-frames	Apr. 30, 1878	13	774
10, 515	Hutchison, James, Newark, N. J., assignor to Thomas Potter, Sons & Co., Philadelphia, Pa. Oil-cloths	Mar. 12, 1878	13	458
10, 516	Same. .... Oil-cloths	Mar. 12, 1878	13	458
10, 408	Ihlenburg, Herman, assignor to MacKellar, Smiths & Jordan, Philadelphia, Pa. Font of printing-types	Jan. 22, 1878	13	126
10, 417	Same. .... Font of printing-types	Jan. 29, 1878	13	179
10, 446	Same. .... same	Feb. 12, 1878	13	278
10, 447	Same. .... same	Feb. 12, 1878	13	278
10, 517	Same. .... Fonts of printing-types	Mar. 12, 1878	13	458
10, 518	Same. .... same	Mar. 12, 1878	13	458
10, 667	Same. .... Font of printing-types	May 7, 1878	13	820
10, 668	Same. .... same	May 7, 1878	13	820
10, 712	Same. .... same	June 4, 1878	13	1012
10, 915	Same. .... same	Nov. 19, 1878	14	750
10, 660	Jackson, William W., assignor to MacKellar, Smiths & Jordan, Philadelphia, Pa. Font of printing-types	May 7, 1878	13	820
10, 733	Same. .... Font of printing-types	June 25, 1878	13	1150
10, 828	Jacoby, Gustav, New York, N. Y. Cigar-box	Sept. 10, 1878	14	380
10, 387	Jennings, Abraham G., Brooklyn, N. Y. Lace fabric	Jan. 1, 1878	13	7
10, 388	Same. .... Lace purling	Jan. 1, 1878	13	7
10, 448	Jennings, Warren P., Brooklyn, N. Y. Fringed lace fabric	Feb. 12, 1878	13	278
10, 829	Jones, Edson S., assignor to Providence Tool Company, Providence, R. I. Leg-frames of sewing-machines	Sept. 17, 1878	14	416
10, 628	Jones, Merwin C., Thomaston, Conn., assignor to Seth Thomas Clock Company, New York, N. Y. Clock-case	Apr. 16, 1878	13	678

## Alphabetical list of patentees of designs for the year 1878—Continued.

No.	Name, residence, and design.	Date.	Official Gazette.	
			Vol.	Page.
10, 616	Kaldenberg, F. Julius, New York, N. Y. Umbrella-handles.	Apr. 2, 1878	13	586
	Karsch, John M., et al. (See Penchard, Charles, assignor.)			
10, 910	Kell, Francis, New York, N. Y. Letter-boxes.	Nov. 19, 1878	14	750
	Kendall, William B. (See Guiraud, Etienne, assignor.)			
10, 519	Kendall, William B., Brooklyn, N. Y. Carpets.	Mar. 12, 1878	13	468
10, 959	Kenz, John, and George Kraft, New Orleans, La. Shoes.	Dec. 10, 1878	14	882
10, 647	Kimberly, Samuel, Norfolk, Va. Packages.	Apr. 22, 1878	13	730
10, 474	Kirschner, Daniel C., assignor to Stephen Sandford, Amsterdam, N. Y. Carpets.	Feb. 18, 1878	13	326
	Knowles, J. B. (See Ladd, Samuel J., assignor.)			
	Knowles, S. M. (See Ladd, Samuel J., assignor.)			
	Kraft, George. (See Kenz & Kraft.)			
10, 746	Kreps, William S., assignor to White, Potter & Paigo Manufacturing Company, Brooklyn, N. Y. Mirror-frames.	July 9, 1878	14	48
10, 747	Same same	July 9, 1878	14	48
10, 748	Same same	July 9, 1878	14	48
10, 749	Same same	July 9, 1878	14	48
	La Belle Glass Company. (See Winship, Frank C., assignor.)			
10, 521	Ladd, Samuel J., assignor to J. B. and S. M. Knowles, Providence, R. I. Spoon-handles.	Mar. 12, 1878	13	468
	Landenberger Manufacturing Company, Martin. (See Landenberger, Martin, assignor.)			
10, 761	Landenberger, Martin, assignor to Martin Landenberger Manufacturing Company, Philadelphia, Pa. Stocking.	July 30, 1878	14	190
	Lane, Edwin J., et al. (See Burnham, Caroline A., assignor.)			
10, 738	Larson, Nels, Saint Olaf, Iowa. Ornamental corner and cornice brick.	July 2, 1878	14	8
	Lawson, Robert W. (See Gravely & Lawson.)			
10, 881	Learned, Charles H., Meriden, Conn. Funeral ornament.	Oct. 29, 1878	14	636
10, 718	Lesser, Lewis A., Baltimore, Md. Wall-pocket.	June 11, 1878	13	1048
10, 623	Little, Andrew, New York, N. Y. Font of printing-types.	Apr. 9, 1878	13	628
10, 862	Same same	Oct. 8, 1878	14	828
10, 894	Lloyd, Thomas, Boston, Mass. Holy-water font.	Nov. 5, 1878	14	699
10, 520	Lomas, John R., assignor to B. Shoninger, New Haven, Conn. Piano-case.	Mar. 12, 1878	13	458
10, 593	Same Organ-case	Mar. 26, 1878	13	550
10, 604	Same same	Mar. 26, 1878	13	550
	Lovell & Co., F. H. (See Fowler, Samuel W., assignor.)			
	Lowell Manufacturing Company. (See Fisher, Edwin, assignor.)			
	Same (See Fisher, John, assignor.)			
	Same (See Ney, Elemir J., assignor.)			
	Same (See Swapp, Charles W., assignor.)			
10, 435	Luchs, Asher N., New York, N. Y. Collar and cuff boxes.	Feb. 5, 1878	13	282
10, 783	Lyon, Amasa, New York, N. Y. Umbrella-handle.	Aug. 20, 1878	14	373
	Lyon, Nelson. (See Montignani, John O., assignor.)			
	MacKellar, Smiths & Jordan. (See Ihlenburg, Herman, assignor.)			
	Same (See Jackson, William W., assignor.)			
	Same (See MacKellar, Thomas, assignor.)			
	Same (See Ruthven, Edwin C., assignor.)			
	Same (See Smith, Richard, assignor.)			
10, 955	MacKellar, Thomas, assignor to MacKellar, Smiths & Jordan, Philadelphia, Pa. Font of printing-types.	Dec. 10, 1878	14	882
10, 395	Maddock, Thomas, New York, N. Y. Handles of table-ware.	Jan. 8, 1878	13	48
10, 779	Magee, Charles, Brooklyn, N. Y., assignor to Bigelow Carpet Company, Clinton, Mass. Carpet.	Aug. 13, 1878	14	236
10, 780	Same same	Aug. 13, 1878	14	236
10, 870	Same same	Oct. 15, 1878	14	582
10, 657	Magee, Frank A., Chelsea, assignor to Magee Furnace Company, Boston, Mass. Oil-stoves.	Apr. 30, 1878	13	774
	Magee Furnace Company. (See Magee, Frank A., assignor.)			
10, 874	Magee, John, Brooklyn, N. Y., assignor to Bigelow Carpet Company, Clinton, Mass. Carpet.	Oct. 22, 1878	14	602
10, 966	Marley, James H., Newark, N. J. Shirt-bosom.	Dec. 17, 1878	14	904
	Mauran, John T. (See Britton, William, assignor.)			
	McCallum, Hugh, et al. (See Heald, Alfred, assignor.)			
	McCallum, William, et al. (See Heald, Alfred, assignor.)			
10, 543	McCallum, William, Yonkers, assignor to Bigelow Carpet Company, New York, N. Y. Carpets.	Mar. 19, 1878	13	561
10, 888	McCallum, William, Yonkers, N. Y., assignor to Bigelow Carpet Company, Clinton, Mass. Carpet.	Oct. 29, 1878	14	696
10, 701	McComas, William R., Oakley, assignor to Crane, Breed & Co., Cincinnati, Ohio. Coffin-handles.	Aug. 27, 1878	14	210
10, 674	Same Handles.	Dec. 17, 1878	14	894
10, 784	McFarlan, Charles E., assignor to Crane, Breed & Co., Cincinnati, Ohio. Funeral ornaments.	Aug. 20, 1878	14	272
10, 402	McNair, David, assignor to Roxbury Carpet Company, Boston, Mass. Carpet.	Jan. 15, 1878	13	11
10, 634	McNeven, John, New York, N. Y. Child's dress.	Apr. 16, 1878	13	678
10, 523	Meinberg, Franz, New York, N. Y. Brow-bands for bridles.	Mar. 12, 1878	13	458
	Meriden Britannia Company. (See Hirschfeld, Henry W., assignor.)			
	Same (See Smith, William M., assignor.)			
10, 425	Meyer, Charles T. and Victor E., Bergen, N. J., assignors to Edward C. Sampson, New York, N. Y. Oil-cloth.	Jan. 29, 1878	13	179
10, 426	Same same	Jan. 29, 1878	13	179
10, 427	Same same	Jan. 29, 1878	13	179
10, 428	Same same	Jan. 29, 1878	13	179
10, 429	Same same	Jan. 29, 1878	13	179
10, 430	Same same	Jan. 29, 1878	13	179
10, 431	Same same	Jan. 29, 1878	13	179
10, 432	Same same	Jan. 29, 1878	13	179
10, 433	Same same	Jan. 29, 1878	13	179
10, 434	Same same	Jan. 29, 1878	13	179
10, 435	Same same	Feb. 5, 1878	13	232
10, 436	Same same	Feb. 5, 1878	13	232
10, 437	Same same	Feb. 5, 1878	13	232
10, 438	Same same	Feb. 5, 1878	13	232
10, 439	Same same	Feb. 5, 1878	13	232
10, 440	Same same	Feb. 5, 1878	13	232
10, 441	Same same	Feb. 5, 1878	13	232
10, 442	Same same	Feb. 5, 1878	13	232
10, 638	Same Oil-cloths	Apr. 30, 1878	13	774
10, 639	Same same	Apr. 30, 1878	13	774
10, 660	Same same	Apr. 30, 1878	13	774
10, 661	Same same	Apr. 30, 1878	13	774
10, 662	Same same	Apr. 30, 1878	13	774
10, 663	Same same	Apr. 30, 1878	13	774
10, 670	Same Oil-cloth	May 7, 1878	13	820
10, 671	Same same	May 7, 1878	13	820
10, 672	Same same	May 7, 1878	13	820
10, 721	Same Oil-cloths	June 11, 1878	13	1048
10, 722	Same same	June 11, 1878	13	1048

## Alphabetical list of patentees of designs for the year 1878—Continued.

No.	Name, residence, and design.	Date.	Official Gazette.	
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10, 723	Meyer, Charles T. and Victor E., Bergen, N. J., assignor to Edward C. Sampson, New York, N. Y. Oil-cloths	June 11, 1878	13	1048
10, 724	Same same	June 11, 1878	13	1048
10, 770	Same same	Aug. 6, 1878	14	206
10, 771	Same same	Aug. 6, 1878	14	206
10, 772	Same same	Aug. 6, 1878	14	206
10, 794	Same same	Sept. 3, 1878	14	348
10, 795	Same same	Sept. 3, 1878	14	348
10, 900	Same Oil-cloth	Nov. 12, 1878	14	716
10, 901	Same same	Nov. 12, 1878	14	716
10, 902	Same same	Nov. 12, 1878	14	716
10, 903	Same same	Nov. 12, 1878	14	716
10, 904	Same same	Nov. 12, 1878	14	716
10, 905	Same same	Nov. 12, 1878	14	716
10, 916	Same Oil-cloths	Nov. 19, 1878	14	750
10, 917	Same same	Nov. 19, 1878	14	750
10, 918	Same same	Nov. 19, 1878	14	750
10, 919	Same same	Nov. 19, 1878	14	750
10, 946	Same Oil-cloth	Dec. 10, 1878	14	862
10, 947	Same same	Dec. 10, 1878	14	862
10, 948	Same same	Dec. 10, 1878	14	862
10, 949	Same same	Dec. 10, 1878	14	862
10, 950	Same same	Dec. 10, 1878	14	862
10, 951	Same same	Dec. 10, 1878	14	862
10, 952	Same same	Dec. 10, 1878	14	862
	Meyer, Victor E. (See Meyer, Charles T. and Victor E.)			
	Myers, Osborn & Co. (See Carter, John V. B., assignor.)			
	Mickle, John, jr., et al. (See Atwater, Richard M., assignor.)			
	Mickle, John, jr. (See Tatum, Charles A., assignor.)			
	Miller & Co., E. (See Barkentin, George S., assignor.)			
	Miller & Co., Edward. (See Bartlett, Truman H., assignor.)			
	Miller, Isaac M. (See Miller, James W. and Isaac M.)			
10, 403	Miller, James W. and Isaac M., Newark, N. J. Buttons, studs, and other jewelry	Jan. 15, 1878	13	11
10, 522	Same Buttons, studs, &c.	Mar. 12, 1878	13	458
10, 830	Miller, James W., Newark, and Isaac M. Miller, Orange, N. J. Buttons, &c.	Sept. 17, 1878	14	416
10, 831	Same same	Sept. 17, 1878	14	416
10, 832	Same same	Sept. 17, 1878	14	416
10, 833	Same same	Sept. 17, 1878	14	416
10, 727	Miller, John E., Pittsburg, Pa. Glassware	June 18, 1878	13	1084
10, 650	Miller, William A. L., San Francisco, Cal. Cabinet-jewelry	Apr. 23, 1878	13	730
10, 683	Mills, George M., Philadelphia, Pa. Stick-candy	Oct. 29, 1878	14	636
10, 832	Same same	Oct. 29, 1878	14	636
10, 629	Moesinger, Henry, Buffalo, N. Y. Badge	Apr. 16, 1878	13	678
10, 762	Montignani, John O., assignor of one-half interest to Nelson Lyon, Albany, N. Y. Hat and coat rack	July 30, 1878	14	160
10, 763	Same Hat and coat rack	July 30, 1878	14	160
10, 863	Moonella, Adolph, New York, N. Y. Cigar-box	Oct. 8, 1878	14	528
10, 524	Moore, Edward C., Yonkers, assignor to Tiffany & Co., New York, N. Y. Spoon and fork handles	Mar. 12, 1878	13	458
10, 393	Morgan, Elisha, jr., assignor to Chicago Stamping Company, Chicago, Ill. Tea canister or caddy	Jan. 8, 1878	12	48
10, 394	Same Canister or caddy front	Jan. 8, 1878	13	48
10, 436	Morgans, Morgan, jr., Brooklyn, N. Y. Handles of spoons, ladles, &c.	Feb. 5, 1878	13	232
	Moses, James. (See Barlow & Moses.)			
10, 899	Mott Iron Works, J. L. (See Burrows, William, assignor.)			
10, 781	Murray, William, Chicago, Ill. Font of printing-type	Nov. 12, 1878	14	716
10, 875	Neil, John, New York, N. Y., assignor to Bigelow Carpet Company, Clinton, Mass. Carpet	Aug. 13, 1878	14	236
10, 475	Same same	Oct. 22, 1878	14	602
10, 476	Ney, Elemer J., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpets	Feb. 19, 1878	13	326
10, 477	Same same	Feb. 19, 1878	13	326
10, 478	Same same	Feb. 19, 1878	13	326
10, 479	Same same	Feb. 19, 1878	13	326
10, 480	Same same	Feb. 19, 1878	13	326
10, 481	Same same	Feb. 19, 1878	13	326
10, 482	Same same	Feb. 19, 1878	13	326
10, 483	Same same	Feb. 19, 1878	13	326
10, 484	Same same	Feb. 19, 1878	13	326
10, 485	Same same	Feb. 19, 1878	13	326
10, 486	Same same	Feb. 19, 1878	13	326
10, 487	Same same	Feb. 19, 1878	13	326
10, 488	Same same	Feb. 19, 1878	13	326
	Nicholson, William H., et al. (See Atwater, Richard M., assignor.)			
	Nicholson, William H. (See Tatum, Charles A., assignor.)			
10, 611	Nirdlinger, Albert H., assignor to Stein Manufacturing Company, Rochester, N. Y. Burial-casket molding	Mar. 26, 1878	13	550
10, 776	Same Burial-caskets	Aug. 13, 1878	14	236
10, 630	Noble, William J., New York, N. Y. Burial-casket	Apr. 16, 1878	13	678
10, 541	Nordmann, Henry, New York, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpets	Mar. 19, 1878	13	501
10, 819	Nordmann, Henry, Brooklyn, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpets	Sept. 10, 1878	14	380
10, 639	Norman, Oscar, Boston, Mass. Billiard-table leg	Apr. 16, 1878	13	678
	North American Iron Works. (See Tweeddale, William, assignor.)			
10, 542	Norton, Edwin, Chicago, Ill. Caddy	Mar. 19, 1878	13	501
10, 535	Norton, Rowland S., Troy, N. Y. Cuff	Mar. 12, 1878	13	458
10, 789	Nunen, John W., Charleston, S. C. Playing-cards	Aug. 27, 1878	14	310
10, 389	Nyholm, Emelie B., Philadelphia, Pa. Knitted fabric	Jan. 1, 1878	13	7
10, 786	O'Hanlon, William, Manchester, Great Britain. Counterpane or quilt	Aug. 20, 1878	14	272
10, 449	Pardoe, William A., assignor to Alexander Smith & Sons Carpet Company, Yonkers, N. Y. Carpets	Feb. 12, 1878	13	278
10, 508	Parker, William E., assignor to C. B. Stanley & Co., New Britain, Conn. Chess-men	Mar. 5, 1878	13	410
10, 908	Patitz, Albert, assignor to Bradley & Hubbard Manufacturing Company, West Meriden, Conn. Inkstand-holders	Nov. 12, 1878	14	716
10, 750	Pearl, Adolph Brooklyn, N. Y. Paper cases for cigarettes	July 9, 1878	14	48
10, 906	Pease, Charles E., Dayton, Ohio. Pattern for hand-wheels for valves	Nov. 12, 1878	14	716
10, 594	Penchard, Charles, assignor to William M. Watson, John M. Karsch, and William E. Watson, New York, N. Y. Chairs	Mar. 26, 1878	13	550
10, 595	Same same	Mar. 26, 1878	13	550



*Alphabetical list of patentees of designs for the year 1878—Continued.*

No.	Name, residence, and design.	Date.	Official Gazette.	
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10, 596	Penchard, Charles, assignor to William M. Watson, John M. Karsch, and William E. Watson, New York, N. Y. Chairs	Mar. 26, 1878	13	550
10, 597	Same.....same	Mar. 26, 1878	13	550
10, 526	Pennell, Thomas E., Brooklyn, N. Y., assignor to Thomas Potter, Sons & Co., Philadelphia, Pa. Oil-cloths	Mar. 12, 1878	13	458
10, 527	Same.....same	Mar. 12, 1878	13	458
10, 790	Petit, Eugène, Paris, France, assignor to Alexander Smith & Sons Carpet Company, Yonkers, N. Y. Carpeting	Aug. 27, 1878	14	310
10, 849	Same.....same	Oct. 1, 1878	14	488
10, 850	Same.....same	Oct. 1, 1878	14	488
10, 544	Piggott, George W., New York, N. Y. Carpets	Mar. 19, 1878	13	501
10, 820	Piggott, George W., New York, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpets	Sept. 10, 1878	14	380
10, 821	Same.....same	Sept. 10, 1878	14	380
10, 822	Same.....same	Sept. 10, 1878	14	380
10, 967	Pine, Charles S., Providence, R. I. Watch-chain charm	Dec. 17, 1878	14	904
10, 640	Pirie, Martin H., assignor to Alexander Pirie Sons, Aberdeen, Scotland. Writing-paper	Apr. 16, 1878	13	678
10, 641	Same.....same	Apr. 16, 1878	13	678
10, 385	Pirie Sons, Alexander. (See Pirie, Martin H., assignor.)			
10, 385	Plock, Franz, New York, assignor to George W. and George C. Blabou, and John C. S. Davis, Philadelphia, Pa. Oil-cloth	Jan. 1, 1878	13	7
10, 624	Porter, Frederick E., Baltimore, Md. Wall-pocket	Apr. 9, 1878	13	638
10, 525	Post, Cornelia M., Plainfield, N. J., assignor to Thomas Potter, Sons & Co., Philadelphia, Pa. Oil-cloths	Mar. 12, 1878	13	458
	Potter, Sons & Co., Thomas. (See Hoffman, Henry J., assignor.)			
	Same.....(See Hutchison, James, assignor.)			
	Same.....(See Pennell, Thomas E., assignor.)			
	Same.....(See Post, Cornelia M., assignor.)			
10, 409	Prabar, Louis, New York, N. Y. Pocket-book frames	Jan. 22, 1878	13	126
	Providence Tool Company. (See Jones, Edson S., assignor.)			
10, 708	Pyne, Edmund, New York, N. Y., assignor to Bigelow Carpet Company, Clinton, Mass. Carpet	June 4, 1878	13	1012
10, 889	Same.....same	Oct. 29, 1878	14	636
10, 972	Raymond, Cadwallader M., Boston, Mass. Metallophone	Dec. 17, 1878	14	904
10, 679	Read, Joseph A., Philadelphia, Pa., assignor to Gilbert Combs and John Bawden, Freehold, N. J. Summer-piece or register-front	May 14, 1878	13	872
10, 680	Same.....same	May 14, 1878	13	872
10, 728	Redway, Albert J., Avondale, Ohio. Stoves	June 18, 1878	13	1084
	Reed & Barton. (See Beattie, William C., assignor.)			
10, 889	Same.....(See Fatoux, Alexis, assignor.)			
10, 404	Reed, John R., Westfield, Mass. Coffin-rails	Jan. 15, 1878	13	11
10, 410	Same.....Coffin-screws	Jan. 22, 1878	13	126
	Repetti, George R. (See Weller & Repetti.)			
10, 827	Reuter, Conrad, assignor to Cincinnati Type Foundry Company, Cincinnati, Ohio. Font of printing-types	Sept. 10, 1878	14	380
	Rhouer, Frank. (See Willershausen & Rhouer.)			
10, 895	Rich, Dwight B., Boston, Mass. Chimney-caps and ventilator	Nov. 5, 1878	14	680
	Richardson, William A. (See Harrington & Richardson.)			
10, 536	Richers, Charles F., assignor to Wood & Hughes, New York, N. Y. Spoon and fork handles	Mar. 12, 1878	13	458
10, 537	Same.....same	Mar. 12, 1878	13	458
10, 512	Same.....Handles for spoons, forks, knives, &c	Nov. 19, 1878	14	750
10, 528	Rinckwitz, Richard, New York, N. Y. Badge	Mar. 12, 1878	13	458
	Ritchie, Francis. (See Vedder, Ritchie & Heister.)			
10, 411	Robert, Arnold, Brooklyn, N. Y. Watch-cases or lockets	Jan. 22, 1878	13	126
	Roberts, Charles, et al. (See Atwater, Richard M., assignor.)			
	Same.....(See Tatum, Charles A., assignor.)			
	Rockwell, Lucius A. (See Fowler & Rockwell.)			
	Rogers & Brother, C. (See Rogers & Huggins, assignors.)			
	Rogers & Brothers, C. (See Rogers, J. Wilbur, assignor.)			
10, 631	Rogers, Cephas B., and James S. Huggins, assignor to C. Rogers & Brother, West Meriden, Conn. Casket-screw	Apr. 16, 1878	13	678
10, 911	Rogers, Charles A., Boston, Mass. Handled dishes	Nov. 19, 1878	14	750
10, 719	Rogers, John, New Canaan, Conn. Group of statuary	June 11, 1878	13	1048
10, 869	Same.....same	Oct. 15, 1878	14	562
10, 956	Same.....same	Dec. 10, 1878	14	892
10, 752	Rogers, John K., Brookline, Mass. Font of printing-types	July 9, 1878	14	43
10, 834	Rogers, J. Wilbur, assignor to C. Rogers & Brothers, West Meriden, Conn. Coffin-screw	Sept. 17, 1878	14	416
10, 598	Rollings, John E., New York, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpets	Mar. 26, 1878	13	550
10, 599	Same.....same	Mar. 26, 1878	13	550
10, 600	Same.....same	Mar. 26, 1878	13	550
10, 601	Same.....same	Mar. 26, 1878	13	550
10, 602	Same.....same	Mar. 26, 1878	13	550
10, 823	Same.....same	Sept. 10, 1878	14	380
	Roxbury Carpet Company. (See Daniel, Eugene, assignor.)			
	Same.....(See McNair, David, assignor.)			
	Same.....(See Stearns, Thomas J., assignor.)			
10, 489	Ruthven, Edwin C., assignor to MacKellar, Smiths & Jordan, Philadelphia, Pa. Font of printing-types	Feb. 19, 1878	13	326
	Sanford, Stephen. (See De Hart, William, assignor.)			
	Same.....(See Kirschner, Daniel C., assignor.)			
	Same.....(See Uster, Cornelius, assignor.)			
	Sampson, Edward C. (See Meyer, Charles T. and Victor E., assignor.)			
	Schrenkeisen, H., et al. (See Travis, Joseph H., assignor.)			
	Schrenkeisen, M., et al. (See Travis, Joseph H., assignor.)			
	Schrenkeisen, M. & H. (See Travis, Joseph H., assignor.)			
10, 686	Seidensticker, Frederick R., assignor to Bradley & Hubbard Manufacturing Company, West Meriden, Conn. Extension lamp-fixture	May 21, 1878	13	918
10, 907	Seligberg, Arnold, New York, N. Y. Toy money-banks	Nov. 12, 1878	14	716
	Seymour Chair Manufactory, Henry L. (See Harwood & Wood, assignors.)			
	Shaw, Kendall & Co. (See Wolcott, Joseph L., assignor.)			
	Sheeler, Buckwalter & Co. (See Wemyss, Alexander, assignor.)			
10, 729	Shirley, Frederick S., New Bedford, Mass. Glass and lava ware	June 18, 1878	13	1084
	Shoeminger, Adolph. (See Unzicker, Adolph, assignor.)			
10, 938	Shoeminger, Adolph, Chicago, Ill. Running-gear of baby-carriages	Dec. 3, 1878	14	824
10, 939	Same.....Sleds	Dec. 3, 1878	14	824

*Alphabetical list of patentees of designs for the year 1878—Continued.*

No.	Name, residence, and design.	Date.	Official Gazette.	
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10, 968	Shoninger, B. ( <i>See</i> Lomas, John R., assignor.)	Dec. 17, 1878	14	904
	Simons, Leopold, New York, N. Y. Cigar-boxes			
	Simpson, Hall, Miller & Co. ( <i>See</i> Hull, Gurdon W., assignor.)			
	Same.....( <i>See</i> Vasseur, Herman, assignor.)			
10, 600	Sloan, Andrew J., <i>et al.</i> ( <i>See</i> Heald, Alfred, assignor.)	May 21, 1878	13	918
10, 682	Smith, Earl A., assignor to Waterbury Buckle Company, Waterbury, Conn. Buckles	May 14, 1878	13	872
10, 683	Smith, Dwight L., assignor to Waterbury Buckle Company, Waterbury, Conn. Buckles	May 14, 1878	13	872
10, 547	Same.....	Mar. 19, 1878	13	501
10, 548	Smith, John H., Enfield, assignor to Hartford Carpet Company, Hartford, Conn. Carpets	Mar. 19, 1878	13	501
10, 688	Same.....	May 21, 1878	13	918
	Smith, Matthew, Pittsburg, Pa. Glassware			
	Smith, R. Pearsall, <i>et al.</i> ( <i>See</i> Atwater, Richard M., assignor.)			
	Smith, R. Pearsall. ( <i>See</i> Tatum, Charles A., assignor.)			
10, 673	Smith, Richard, assignor to MacKellar, Smiths & Jordan, Philadelphia, Pa. Font of printing-types.	May 7, 1878	13	820
	Smith & Sons Carpet Company, Alexander. ( <i>See</i> Allan, Robert, assignor.)			
	Same.....			
	Same.....( <i>See</i> Pardoe, William A., assignor.)			
	Same.....( <i>See</i> Petit, Eugène, assignor.)			
10, 545	Smith, William H., Enfield, assignor to Hartford Carpet Company, Hartford, Conn. Carpets	Mar. 19, 1878	13	501
10, 544	Same.....	Mar. 19, 1878	13	501
10, 396	Smith, William M., assignor to Meriden Britannia Company, Meriden, Conn. Funeral ornament.	Jan. 8, 1878	13	48
10, 755	Smith, William M., assignor to Meriden Britannia Company, West Meriden, Conn. Coffin-handles.	July 16, 1878	14	86
10, 927	Same.....Coffin-screws	Nov. 26, 1878	14	788
10, 960	Somes, Hiram S., Attleborough, Mass. Breastpin	Dec. 10, 1878	14	862
10, 687	Spicers & Peckham. ( <i>See</i> Spicer, William A., assignor.)			
	Spicer, William A., assignor to Spicers & Peckham, Providence, R. I. Stoves	May 21, 1878	13	918
	Spoerl, C., <i>et al.</i> ( <i>See</i> Fuchs, Eugene A., assignor.)			
	Stanley & Co., C. B. ( <i>See</i> Parker, William E., assignor.)			
10, 632	Starr, John F., jr., Camden, N. J. Sheet-metal wafer-pipe	Apr. 16, 1878	13	678
10, 617	Stattmann, Christian, Chicago, Ill. Muff	Apr. 2, 1878	13	508
10, 529	Stearns, Thomas J., assignor to Roxbury Carpet Company, Boston, Mass. Carpets	Mar. 12, 1878	13	458
10, 530	Same.....	Mar. 12, 1878	13	458
10, 605	Same.....	Mar. 26, 1878	13	550
10, 606	Same.....	Mar. 26, 1878	13	550
10, 633	Same.....	Apr. 16, 1878	13	678
10, 739	Same.....	July 2, 1878	14	8
10, 674	Same.....	May 7, 1878	13	820
10, 839	Same.....	Sept. 17, 1878	14	416
10, 876	Same.....	Oct. 22, 1878	14	602
	Stein Manufacturing Company. ( <i>See</i> Nirdlinger, Albert H., assignor.)			
10, 648	Steinbre, Abraham, jr., Cincinnati, Ohio. Set of jewelry	Apr. 23, 1878	13	730
10, 740	Steinway, Christian F. T., assignor to self and William Steinway, New York, N. Y. Piano	July 2, 1878	14	8
10, 741	Same.....Upright piano-forte case	July 2, 1878	14	8
	Steinway, William. ( <i>See</i> Steinway, Christian F. T., assignor.)			
	Sterling Organ Company, Charles A. ( <i>See</i> Blake, Rufus W., assignor.)			
10, 509	Stevens, Elisha, Cromwell, Conn. Toy money-box	Mar. 5, 1878	13	410
10, 730	Stockhausen, Mathew, and Walter Becklund, New York, N. Y. Cigar-box	June 18, 1878	13	1084
10, 607	Storm, Gustavus, Philadelphia, Pa. Perfumery-bottles.	Mar. 26, 1878	13	550
10, 503	Sturdy, Albert W., Attleborough, Mass., assignor to Sturdy Brothers & Co., New York, N. Y. Sleeve-buttons	Feb. 26, 1878	13	370
	Sturdy Brothers & Co. ( <i>See</i> Sturdy, Albert W., assignor.)			
10, 490	Swapp, Charles W., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpets	Feb. 19, 1878	13	326
10, 491	Same.....	Feb. 19, 1878	13	326
10, 492	Same.....	Feb. 19, 1878	13	326
10, 493	Same.....	Feb. 19, 1878	13	326
10, 835	Same.....	Sept. 17, 1878	14	416
10, 836	Same.....	Sept. 17, 1878	14	416
10, 837	Same.....	Sept. 17, 1878	14	416
10, 838	Same.....	Sept. 17, 1878	14	416
10, 608	Swarts, J. Wilson, Philadelphia, Pa. Crayons	Mar. 26, 1878	13	550
10, 773	Tallmadge, Charles S., Cincinnati, Ohio. Pocket-lamp	Aug. 6, 1878	14	206
	Tatum, Charles A., <i>et al.</i> ( <i>See</i> Atwater, Richard M., assignor.)			
10, 675	Tatum, Charles A., New York, N. Y., assignor to self, James Whitall, R. Pearsall Smith, John Mickle, jr., Charles Roberts, and William H. Nicholson. Bottles	May 7, 1878	13	820
10, 676	Same.....	May 7, 1878	13	820
10, 851	Taylor, Augustus E., New Britain, Conn. Toy money-box	Oct. 1, 1878	14	488
	Taylor, Warren H. ( <i>See</i> Towne & Taylor.)			
	Thomas Clock Company, Seth. ( <i>See</i> Ayer, George, assignor.)			
	Same.....( <i>See</i> Hoyting, George, assignor.)			
	Same.....( <i>See</i> Jones, Merwin C., assignor.)			
10, 843	Tiffany & Co. ( <i>See</i> Moore, Edward C., assignor.)			
	Towne, Henry R., and Warren H. Taylor, assignors to Yale Lock Manufacturing Company, Stamford, Conn. Padlocks	Sept. 24, 1878	14	450
10, 753	Travis, Joseph H., assignor to M. & H. Schrenheisen, New York, N. Y. Covering for chairs, &c.	July 9, 1878	14	48
10, 935	Same.....Coverings for chairs and parlor suites	Nov. 26, 1878	14	788
10, 969	Same.....Chair and parlor-suite coverings	Dec. 17, 1878	14	904
	Trenton Lock and Hardware Company. ( <i>See</i> Gerard, John, assignor.)			
10, 920	Tucker, George W., Waterbury, Conn. Pulls for drawers, &c.	Nov. 19, 1878	14	750
10, 928	Same.....	Nov. 26, 1878	14	788
10, 649	Turner, James B., Rochester, N. Y. Advertising-monuments	Apr. 23, 1878	13	730
10, 418	Tweeddale, William, assignor to North American Iron Works, Brooklyn, N. Y. Fountain-basin or flower-bed	Jan. 29, 1878	13	179
10, 618	Same.....Vase	Apr. 2, 1878	13	598
10, 840	Tyson, Charles, Philadelphia, Pa. Steam-engine frames	Sept. 17, 1878	14	416
10, 734	Unzieker, Otto, assignor to Adolph Shoeninger, Chicago, Ill. Hobby-horses	June 25, 1878	13	1130
10, 494	Uster, Cornelius, assignor to Stephen Sandford, Amsterdam, N. Y. Carpets	Feb. 19, 1878	13	326
10, 713	Same.....	June 4, 1878	13	1012
10, 824	Vaillant, Charles R., assignor to Gulf City Foundry Company, Mobile, Ala. Gas-making stoves	Sept. 10, 1878	14	380
10, 796	Van Buren, Jafew S., West Troy, N. Y. Heating-stove	Sept. 3, 1878	14	349
10, 691	Vasseur, Herman, assignor to Simpson, Hall, Miller & Co., Wallingford, Conn. Spoon-handles	May 21, 1878	13	918
10, 756	Same.....Spoons	July 16, 1878	14	86
10, 861	Same.....	Oct. 8, 1878	14	526
10, 929	Vedder, Nicholas S., Troy, and Tobias S. Heister, Lansingburg, N. Y., assignors to said Vedder. Stoves	Nov. 26, 1878	14	788
10, 930	Same.....	Nov. 26, 1878	14	788

*Alphabetical list of patentees of designs for the year 1878—Continued.*

No.	Name, residence, and design.	Date.	Official Gazette.	
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10, 931	Vedder, Nicholas S., Troy, and Tobias S. Heister, Lansingburg, N. Y., assignors to said Vedder. Cooking-stoves	Nov. 20, 1878	14	788
10, 932	Same..... same	Nov. 20, 1878	14	788
10, 933	Vedder, Nicholas S., and Francis Ritchie, Troy, and Tobias S. Heister, Lansingburg, N. Y., assignors to said Vedder. Cooking-stoves	Nov. 20, 1878	14	788
10, 934	Vedder, Nicholas S., Troy, and Tobias S. Heister, Lansingburg, N. Y., assignors to Comstock, Castle & Co., Quincy, Ill. Stoves	Nov. 20, 1878	14	788
10, 940	Vedder, Nicholas S., Troy, and Tobias S. Heister, Lansingburg, N. Y., assignors to said Vedder. Cooking-ranges	Dec. 3, 1878	14	824
10, 941	Same..... Stoves	Dec. 3, 1878	14	824
10, 942	Same..... same	Dec. 3, 1878	14	824
10, 945	Same..... Cooking-ranges	Dec. 3, 1878	14	824
10, 953	Vedder, Nicholas S., and Francis Ritchie, Troy, and Tobias S. Heister, Lansingburg, N. Y., assignors to said Vedder. Stoves	Dec. 10, 1878	14	862
10, 957	Same..... same	Dec. 10, 1878	14	862
	Vulcanite Jewelry Company. (See Byron, William, assignor.)			
	Wallace Brothers. (See Hammarth, Jacob, assignor.)			
10, 504	Same..... (See Wallace, Henry L., assignor.)	Feb. 26, 1878	13	370
10, 604	Wallace, Henry L., assignor to Wallace Brothers, Wallingford, Conn. Spoons	Apr. 30, 1878	13	774
	Same..... same			
	Waterbury Buckle Company. (See Smith, Earl A., assignor.)			
	Same..... (See Smith, Dwight L., assignor.)			
10, 774	Watkinson, George, assignor to L. Candee & Co., New Haven, Conn. Overshoes	Aug. 6, 1878	14	206
	Watson, William E., et al. (See Penchard, Charles, assignor.)			
	Watson, William M., et al. (See Penchard, Charles, assignor.)			
10, 495	Webb, Charles James, Randalstown, Ireland. Towels	Feb. 10, 1878	13	328
10, 490	Same..... same	Feb. 19, 1878	13	328
10, 901	Webb, Richard T., Randalstown, Ireland. Woven borders for towels	Dec. 10, 1878	14	862
10, 902	Same..... Woven fabrics	Dec. 10, 1878	14	862
10, 903	Same..... Woven borders for towels	Dec. 10, 1878	14	862
10, 904	Same..... Woven fabrics	Dec. 10, 1878	14	862
	Welch Manufacturing Company, E. N. (See Frisbie, Henry R., assignor.)			
10, 871	Weller, Michael I., and George R. Repetti, Washington, D. C. Cigar-boxes	Oct. 15, 1878	14	562
10, 885	Weller, Michael I., Washington, D. C. Box	Oct. 29, 1878	14	636
10, 886	Same..... same	Oct. 29, 1878	14	636
10, 970	Weller, Michael I., and George R. Repetti, Washington, D. C. Cigar-boxes	Dec. 17, 1878	14	904
10, 512	Wemyss, Alexander, assignor to Sheeler, Buckwalter & Co., Philadelphia, Pa. Cook-stove	Mar. 5, 1878	13	410
10, 421	Wesson, Daniel B., Springfield, Mass. Pistol-handle	Jan. 20, 1878	13	179
10, 422	Same..... same	Jan. 29, 1878	13	179
10, 423	Same..... same	Jan. 29, 1878	13	179
	Weybosset Mills. (See Bosworth, Frederick S., assignor.)			
	Wheeler, Frank E. (See Wheeler, Russell and Frank E.)			
	Wheeler, Parsons & Hayes. (See Beam, Daniel A., assignor.)			
10, 419	Wheeler, Russell and Frank E., Utica, N. Y. Cook-stoves	Jan. 20, 1878	13	179
	Whitall, James, et al. (See Atwater, Richard M., assignor.)			
	Whitall, James. (See Tatum, Charles A., assignor.)			
10, 844	White, Potter & Paige Manufacturing Company. (See Kreps, William S., assignor.)	Sept. 24, 1878	14	450
	Whitman, Royal E., Springfield, Mass. Saddles			
	Wiener & Co. (See Wiener, Simon, assignor.)			
10, 406	Wiener, Simon, assignor to Wiener & Co., Newark, N. J. Harness-trimmings	Jan. 15, 1878	13	11
10, 531	Wilhelm, Gotthilf F., New York, N. Y. Fur trimming	Mar. 12, 1878	13	458
10, 420	Wilkinson, George, assignor to Gorham Manufacturing Company, Providence, R. I. Handles of spoons and forks	Jan. 29, 1878	13	179
10, 511	Willershausen, Siegfried, and Frank Rhoner, New York, N. Y., assignors to said Rhoner. Rocking-chair frame	Mar. 5, 1878	13	410
10, 782	Willershausen, Siegfried, New York, N. Y. Rocking-chair	Aug. 13, 1878	14	236
10, 711	Williams, Edward, New York, N. Y. Badge	June 4, 1878	13	1012
	Wilson Sewing Machine Company. (See Darling, George S., assignor.)			
10, 845	Wilson, James H., Philadelphia, Pa. Buttons	Sept. 24, 1878	14	450
10, 954	Winship, Frank C., assignor to La Belle Glass Company, Bridgeport, Ohio. Combined glass vessels	Dec. 10, 1878	14	862
10, 614	Witthaus, Erich L., Baltimore, Md. Sample-box	Apr. 2, 1878	13	598
10, 775	Wolcott, Joseph L., assignor to Shaw, Kendall & Co., Toledo, Ohio. Hand-wheels for glove and angle valves, &c	Aug. 6, 1878	14	206
	Wood & Hughes. (See Richers, Charles F., assignor.)			
	Wood, Robert. (See Harwood & Wood.)			
10, 636	Wood, Rost O., Buffalo, N. Y. Badge	Apr. 16, 1878	13	678
10, 510	Woodford, James B., Worcester, Mass. Organ-case	Mar. 5, 1878	13	410
	Yale Lock Manufacturing Company. (See Towne & Taylor, assignors.)			
10, 751	Zeigler, Henry S., Philadelphia, Pa. Stove-polish package	July 9, 1878	14	48
10, 651	Zoopfel, Ernst H., New York, N. Y. Jewel-case	Apr. 23, 1878	13	730

## LIST OF TRADE-MARKS REGISTERED DURING THE YEAR 1878.

No.	Name, residence, and title.	Date.	Official Gazette.	
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6, 147	Abrams & Carroll, San Francisco, Cal. Lemonade compound	May 28, 1878	13	970
6, 601	Adams & Co., New York, N. Y. Champagne	Sept. 24, 1878	14	449
5, 480	Adrianne, Platt & Co., Poughkeepsie and New York, N. Y. Reaping-machines and mowing-machines	Jan. 8, 1878	13	48
5, 983	Agalito Fiber Company, New York, N. Y. Mineral product utilized in the manufacture of paper and otherwise	Apr. 30, 1878	13	774
6, 834	Ahl, Amanda, Stillwater, Minn. Salvo	Nov. 26, 1878	14	788
5, 771	Ahrens, Charles A., New York, N. Y. Cigars	Mar. 10, 1878	13	501
6, 682	Albright & Wilson, Oldbury, England. Phosphorus and amorphous phosphorus	Oct. 8, 1878	14	525
6, 310	Alden & Brother, Saint Louis, Mo. Vinegar	July 2, 1878	14	8
6, 411	Alexander, Richard, Kinderhook, N. Y. Small beer, soda, sarsaparilla, and mineral waters, and ginger-ale	July 30, 1878	14	160
5, 349	Allan & Co., J. C., assignors to Ray V. Pierce, Buffalo, N. Y. Medical compound	Apr. 30, 1878	13	773
6, 354	Allan, John C., Buffalo, N. Y. Fly-poison	July 16, 1878	14	86
5, 643	Allen & Co., New York, N. Y. All kinds of manufactured tobacco	Feb. 12, 1878	13	278
6, 617	Same. Smoking and chewing tobacco and cigars	Sept. 24, 1878	14	450
6, 023	Allen & Co., E. S., Cleveland, Ohio. Cigars	May 7, 1878	13	820
6, 240	Allen & Dunning, Paterson, N. J. Smoking-tobacco	June 18, 1878	13	1083
6, 224	Allen, Elisha H., Jr., New York, N. Y. Flannels, sheetings, shirtings, denims, &c.	June 11, 1878	13	1048
6, 689	Allen & Ellis, Cincinnati, Ohio, Chicago, Ill., and New York, N. Y. Plug-tobacco	Oct. 8, 1878	14	525
5, 974	Allison & Hoarn, New York, N. Y. Medicinal preparation known as "Corrasa compound"	Apr. 30, 1878	13	774
6, 870	American Fusee Company (limited), Erie, Pa. Matches and other similar fire and light producers	Dec. 17, 1878	14	903
6, 912	Same	Dec. 17, 1878	14	904
6, 844	American Machine Company, Philadelphia, Pa. Wringing, fluting, and plaiting machines and sad-irons	Nov. 26, 1878	14	788
5, 762	American Meter Company, New York, N. Y., and Philadelphia, Pa. Gas and water registering apparatus	Mar. 19, 1878	13	501
5, 763	Same. Gas and water registering apparatus	Mar. 19, 1878	13	501
5, 764	Same. same	Mar. 19, 1878	13	501
6, 489	American News Company, New York, N. Y. Smoking-tobacco, cigars, and cigarettes	Aug. 20, 1878	14	272
6, 508	Same	Aug. 20, 1878	14	272
6, 543	Same	Sept. 3, 1878	14	348
6, 544	Same	Sept. 3, 1878	14	348
5, 642	American Plumbers' Publishing Company, New York, N. Y. Newspaper periodical	Feb. 12, 1878	13	278
6, 225	American Powder Company, Boston, Mass. Gunpowder	June 11, 1878	13	1048
6, 829	American Shoe Tip Company, Boston, Mass. Tips for boots and shoes	Nov. 26, 1878	14	787
5, 712	Ames, Manning & Ames, Hagerstown, Md. Fertilizers	Mar. 5, 1878	13	410
5, 784	Anders & Brother, C. B., Frederick, Md. Flour	July 23, 1878	14	120
6, 114	Andrews & Co., C. E., Milwaukee, Wis. Baking-powder	Mar. 12, 1878	13	457
6, 024	Same. Prepared coffee, spices, and mustard	May 7, 1878	13	820
6, 461	Same. Baking-powder	Aug. 13, 1878	14	236
6, 661	Same. same	Oct. 1, 1878	14	488
6, 690	Angulo, José R., Key West, Fla. Cigars	Oct. 8, 1878	14	525
6, 592	Ansar, Harford & Co., London, England. Cod-liver oil	Sept. 17, 1878	14	416
6, 593	Same	Sept. 17, 1878	14	416
5, 600	Anthony & Co., E. & H. T., New York, N. Y. Photographic materials and appliances	Feb. 5, 1878	13	232
6, 472	Same. Photographic material	Aug. 13, 1878	14	236
6, 566	Apollinaris Company (limited), London, England. Mineral water	Sept. 10, 1878	14	380
6, 732	Apollinaris Company (limited), London, England, and Apollinaris Brunnen, Germany. Mineral water	Oct. 22, 1878	14	602
5, 801	Appleton, George Washington, Haddonfield, N. J., and Philadelphia, Pa. Medicinal compound	Apr. 2, 1878	13	598
5, 916	Arlington & Sims, Lawrence, Mass. Steam-engines	Apr. 23, 1878	13	729
5, 733	Artotype Company, New York, N. Y. Photographs and photolithographs	Oct. 22, 1878	14	602
5, 898	Asche, C. F., Hamburg, Germany. Bronchial lozenges	Apr. 23, 1878	13	729
6, 244	Aschermann, Charles A., Davenport, Iowa. Bitters	June 18, 1878	13	1083
6, 187	Aschermann & Co., Ed., Milwaukee, Wis. Cigars	June 11, 1878	13	1047
6, 256	Ash & Brother, Louis, New York, N. Y. Cigars and cigarettes	June 18, 1878	13	1084
6, 114	Atkins, Hertel & Co., Baltimore, Md. Medicinal preparation	May 21, 1878	13	918
6, 164	Aufim'orit & Co., C. A., New York, N. Y. Silk ribbons	June 4, 1878	13	1012
5, 829	Ausablo Horse Nail Company, Keesville and New York, N. Y. Horseshoe-nails	Apr. 9, 1878	13	638
6, 525	Austen, William J., Oswego, N. Y. Cologne-water	Sept. 3, 1878	14	348
6, 817	Avery & Sons, B. F., Louisville, Ky. Cast-iron plows	Nov. 26, 1878	14	787
6, 818	Same. Steel plows	Nov. 26, 1878	14	787
5, 857	Babbitt, Benjamin T., New York, N. Y. Soap	Apr. 16, 1878	13	677
5, 798	Same. Laundry-powder	Apr. 2, 1878	13	597
5, 799	Same. Cream of tartar	Apr. 2, 1878	13	597
5, 800	Same. Collars and cuffs	Apr. 2, 1878	13	597
6, 226	Same. Soap	June 18, 1878	13	1083
5, 231	Bachert, Philip, Buffalo, N. Y. Coffee extract or essence	Feb. 5, 1878	13	232
6, 283	Bacon, Baldwin & Co., New York, N. Y. Beaver-cloths	June 25, 1878	13	1130
6, 284	Same	June 25, 1878	13	1130
6, 627	Badger, William G., San Francisco, Cal. Overalls, jumpers, and ready-made goods for outside wear	Sept. 24, 1878	14	450
5, 352	Baetjer, William T., Baltimore, Md. Cologne	Apr. 30, 1878	13	773
6, 837	Bailey & Co., Charles L. (See Ryerson, Joseph T., assignor.)			
5, 488	Benner Brothers, New York, N. Y., and San Francisco, Cal. Men's and boy's clothing	Nov. 26, 1878	14	788
5, 488	Barnes, Bancroft & Co., Buffalo, N. Y. Cotton goods	Jan. 8, 1878	13	48
5, 873	Barnum, Emory E., New York, N. Y. Pills	Apr. 16, 1878	13	678
5, 466	Barnum Frank W., Danbury, Conn. Cologne	Jan. 1, 1878	13	8
5, 699	Bartholomew & Co., New York, N. Y. Water-closets	Mar. 5, 1878	13	410
6, 716	Bartlett, John W., Moline, Ill. Lubricating-oils	Oct. 8, 1878	14	526
6, 782	Bartley, Milton, Pittsburg, Pa. Bottled birch or fermented beer	Nov. 12, 1878	14	716
6, 213	Batchelor Brothers, Philadelphia, Pa. Cigars, cigarettes, and smoking-tobacco	June 11, 1878	13	1048
5, 601	Bateman, F. (See Bateman, E. S. and F.)			
6, 462	Bateman, E. S. & F., Spring Mills, N. J. Cultivators	Feb. 5, 1878	13	232
6, 691	Bates, Charles F., Quincy, Mass. Soap	Aug. 13, 1878	14	236
6, 691	Baur & Betz, New York, N. Y. Lager-beer	Oct. 8, 1878	14	526

*List of trade-marks registered during the year 1878—Continued.*

No.	Name, residence, and title.	Date.	Official Gazette.	
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6, 189	Baxter, Jerome, Memphis, Tenn. Cigars	June 11, 1878	13	1047
6, 474	Baylis, Henry, New York, N. Y. Sewing and knitting needles	Aug. 30, 1878	14	253
6, 555	Beach, Alvin W. and Ellen C., Syracuse, N. Y. Medicine for the cure of ague and fever	Sept. 10, 1878	14	300
	Beach, Ellen C. (See Beach, Alvin W. and Ellen C.)			
6, 300	Beatty, Heins & Co., New York, N. Y. Lubricating compound	July 2, 1878	14	7
6, 285	Beck & Feldkamp, Chicago, Ill. Smoking-tobacco	June 25, 1878	13	1120
5, 671	Becker & Co., H., New York, N. Y. Flour	Feb. 26, 1878	13	370
5, 672	Same	Feb. 26, 1878	13	370
5, 697	Beckman, Noble & Co., Westfield, Mass. Cigars	Mar. 5, 1878	13	410
5, 698	Same	Mar. 5, 1878	13	410
5, 716	Same	Mar. 12, 1878	13	47
6, 018	Belknap & Boynton, Boston, Mass. Flour	Sept. 24, 1878	14	450
6, 877	Bell, Americus, Matawan, N. J. Perfumery	Dec. 17, 1878	14	903
6, 326	Bell & Co., William G., Boston, Mass. Spiced seasonings	July 9, 1878	14	47
6, 512	Bell & Sons, George, Liverpool, England. Lumber	Aug. 27, 1878	14	310
6, 536	Bemis, Emery, Jr., Boston, Mass. Cigars	Sept. 3, 1878	14	343
6, 227	Bennett & Sloan, New Haven, Conn. Baking-powder	June 18, 1878	13	1083
6, 914	Berenburg, Julia Julius, London, England. Champagne	Dec. 17, 1878	14	904
6, 478	Bergtold, Jacob E., Buffalo, N. Y. Fancy furs, such as cloaks, hats, &c	Aug. 30, 1878	14	236
6, 190	Berthold, Hugo, Stapleton, N. Y. Beef-oil	June 11, 1878	13	1047
6, 510	Betts & Co., London, England. Capsules for bottles	Aug. 27, 1878	14	310
5, 569	Bickford, William, Boston, Mass. Liniment	Jan. 20, 1878	13	110
6, 709	Bigelow, John, Philadelphia, Pa. Hat-sweats for hats and caps	Oct. 8, 1878	14	526
5, 510	Binghamton Oil Refining Company, Binghamton, N. Y. Product of petroleum for toilet purposes	Jan. 15, 1878	13	11
6, 104	Binns, George, Jr., Brooklyn, N. Y. Lubricating oil or compound	May 21, 1878	13	917
6, 498	Blackwood & Co., London, England. Marking-ink	Aug. 20, 1878	14	272
5, 463	Blake & Johnson, Waterbury, Conn. Rivets and burs	Jan. 1, 1878	13	8
5, 300	Blakely, John, New York, N. Y. Cigars, cigarettes, and cheroots	Apr. 9, 1878	13	638
6, 789	Blanchet, Frères & Kléber, Rives, France. Writing-paper	Nov. 12, 1878	14	716
6, 835	Same	Nov. 26, 1878	14	788
6, 527	Blankenburg, Rudolph, Philadelphia, Pa. Woolen and worsted yarns	Sept. 3, 1878	14	348
6, 634	Blaskopf & Brown, New York, N. Y. Cigars, cigarettes, and chewing and smoking tobacco	Oct. 1, 1878	14	487
6, 754	Same	Oct. 29, 1878	14	635
6, 430	Bleecker & Co., Albany, N. Y. Bourbon whiskey	July 30, 1878	14	160
6, 768	Block & Son, E., New York, N. Y. Cigars	Nov. 5, 1878	14	600
5, 975	Bloomfield & Co., J. C., New York, N. Y. Extracts and carmines of dye-woods	Apr. 30, 1878	13	774
6, 228	Bohlen & Co., Henry, Philadelphia, Pa. Gin	June 18, 1878	13	1083
6, 692	Bondy & Lederer, New York, N. Y. Cigars	Oct. 8, 1878	14	526
6, 693	Same	Oct. 8, 1878	14	526
6, 694	Same	Oct. 8, 1878	14	526
6, 509	Bonsilade Company (limited), Albany, N. Y., and Newark, N. J. Plastic composition	Aug. 20, 1878	14	272
6, 334	Bourne, Benjamin A., Gloucester House, 37 Piccadilly, England. Ladies' corsets	Nov. 26, 1878	14	788
6, 830	Same			
5, 511	Bowker & Co., W. H., Boston, Mass. Fertilizers, manures, and fertilizing compounds and ingredients	Jan. 15, 1878	13	11
5, 627	Same	Feb. 12, 1878	13	277
5, 673	Same	Feb. 26, 1878	13	370
5, 728	Same	Mar. 12, 1878	13	457
6, 511	Bowring & Archibald, New York, N. Y. Refined petroleum	Aug. 27, 1878	14	310
5, 481	Boyd & Co., Saint Louis, Mo. Plug-tobacco	Jan. 8, 1878	13	48
6, 473	Boyer & Co., Philadelphia, Pa. Boot and shoe blacking	Aug. 30, 1878	14	236
5, 599	Boyer, William W., Baltimore, Md. Canned and hermetically-sealed goods	Jan. 29, 1878	13	180
6, 115	Bradfield, Thomas S., La Grange, Ga. Medicinal preparations	May 21, 1878	13	918
6, 668	Bradlee, Paul B., Brooklyn, N. Y. Preparation for the complexion and skin	Oct. 8, 1878	14	525
5, 820	Brady, Ann E., New York, N. Y. Eye-water	Apr. 2, 1878	13	598
6, 231	Brand & Co., John H., Louisville, Ky. Mustard	June 18, 1878	13	1083
6, 397	Same	July 23, 1878	14	120
6, 168	Brandels, Ludwig, Brooklyn, N. Y. Stench-traps	June 4, 1878	13	1012
5, 532	Brandt Brothers, Newark, N. J. Carbonated beverages	Jan. 22, 1878	13	126
5, 782	Brecht, Gustavus V., Saint Louis, Mo. Cutlery	Mar. 20, 1878	13	530
5, 512	Brewer, H. & J., Springfield, Mass. Toilet-soaps	Jan. 15, 1878	13	11
	Brewer, J. (See Brewer, H. & J.)			
6, 795	Brewer & Sons, C., Boston, Mass. Cigars	Nov. 12, 1878	14	716
6, 796	Same	Nov. 12, 1878	14	716
6, 797	Same	Nov. 12, 1878	14	716
5, 845	Brickey, Franklin W., Prairie du Rocher, Ill. Flour	Apr. 9, 1878	13	638
5, 626	Bridgeport Brass Company, Bridgeport, Conn. Lamp-burners	Sept. 3, 1878	14	348
5, 602	Brokhahne, William, New York, N. Y. Cutlery	Feb. 5, 1878	13	232
5, 603	Same	Feb. 5, 1878	13	232
6, 746	Brown, Arnon, New Haven, Conn. Bread	Oct. 22, 1878	14	602
6, 535	Brown & Brothers, Waterbury, Conn. Metallic alloy for the manufacture of plated ware	Sept. 3, 1878	14	348
6, 396	Brown & Co., D. S., New York, N. Y. Soap	July 23, 1878	14	120
6, 798	Same	Nov. 12, 1878	14	716
6, 519	Brown & Co., David S., New York, N. Y. Cologne-water and other toilet-waters	Aug. 27, 1878	14	310
6, 549	Same	Sept. 3, 1878	14	343
6, 550	Same	Sept. 3, 1878	14	348
6, 020	Brown & Co., H., Hamilton, N. C. Fertilizers	May 7, 1878	13	829
6, 453	Brown & Co., Louis, Philadelphia, Pa. Printing-plates	Aug. 13, 1878	14	236
5, 090	Brown Medicine and Manufacturing Company, Leavenworth, Kans. Medicinal preparations	Mar. 5, 1878	13	410
6, 412	Brown, Reuben A., Westfield, Mass. Cigars	July 30, 1878	14	160
6, 619	Brown & Sons, John, Philadelphia, Pa. Buckskin, jeans, and doeskin cloths	Sept. 24, 1878	14	450
5, 951	Brown, Thomas, Erie, Pa. Lubricating-oil	Apr. 30, 1878	13	773
6, 056	Same	May 14, 1878	13	871
6, 342	Brown, Thomas W., assignor to National Manufacturing Company, Boston, Mass. Wire-gauze fly-traps	July 9, 1878	14	43
6, 590	Brummel, Augustus O., Washington, D. C. Elastic iron paint	Sept. 17, 1878	14	416
6, 602	Brunswick & Balke Company, J. M., Cincinnati, Ohio, and Chicago, Ill. Billiard-table cushions	Sept. 24, 1878	14	449
5, 553	Buchanan & Lyall, New York, N. Y. Plug chewing-tobacco	Jan. 22, 1878	13	126
5, 554	Same	Jan. 22, 1878	13	126
5, 585	Same	Feb. 26, 1878	13	370
5, 950	Buchanan & Lyall, Brooklyn, N. Y. Cigars and cigarettes, fine-cut and plug chewing-tobacco, snuff, and smoking-tobacco	Apr. 30, 1878	13	773
5, 095	Buchanan, Sterling C., Camden, Ark. Liniments, ointments, and eye-waters	May 7, 1878	13	819
5, 917	Buck, Chauncey H., Toledo, Ohio. Gentlemen's shirts	Apr. 23, 1878	13	729
6, 301	Buckner, David, Brooklyn, N. Y. Cigars, cigarettes, and smoking and chewing tobacco	July 2, 1878	11	7
6, 758	Buckwalter, Benjamin R., New York, N. Y. Medicinal preparation	Oct. 29, 1878	14	650



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5,505	Buffalo Grape Sugar Company, Buffalo, N. Y. Starch	Jan. 15, 1878	13	11
5,506	Same same	Jan. 15, 1878	13	11
5,507	Same same	Jan. 15, 1878	13	11
5,508	Same same	Jan. 15, 1878	13	11
5,635	Same same	Feb. 12, 1878	13	278
5,636	Same same	Feb. 12, 1878	13	278
6,282	Same same	June 25, 1878	13	1130
5,715	Bulkley & Moore, New York, N. Y. Plug-tobacco	Mar. 12, 1878	13	457
5,513	Burdett Organ Company (limited), Erie, Pa. Reed-organs	Jan. 15, 1878	13	11
6,431	Burnell & Spinkins, San Francisco, Cal. Ale and porter	July 30, 1878	14	160
5,626	Burnham, Justus A., Chicago, Ill. Toilet preparation for the complexion	Feb. 12, 1878	13	277
6,108	Burns & Byram, Philadelphia, Pa. Roasted and ground coffee, spices, and mustard	May 21, 1878	13	918
6,499	Same Mustard	Aug. 20, 1878	14	272
6,107	Burrage, Charles R., San Francisco, Cal. Medicinal preparation	May 21, 1878	13	918
6,188	Same Soda and cream of tartar	June 11, 1878	13	1047
6,229	Same Carbonate of soda	June 18, 1878	13	1083
6,230	Same Cream of tartar	June 18, 1878	13	1083
6,257	Same Medicinal compound	June 18, 1878	13	1084
6,366	Same Chemical compound for the complexion	July 16, 1878	14	86
6,913	Same Bitters	Dec. 17, 1878	14	904
6,782	Burtis, Josephine T., Rochester, N. Y. Cosmetics	Nov. 12, 1878	14	716
5,874	Buser, William E., Chillicothe, Ohio. Lounges	Apr. 16, 1878	13	678
6,025	Butler, John E., Golconda, Ill. Remedy for piles	May 7, 1878	13	820
6,762	Caldar, Albert L., Providence, R. I. Tooth-powder	Oct. 29, 1878	14	966
6,490	California Cigar Box Company, San Francisco, Cal. Cigars	Aug. 20, 1878	14	272
6,293	Callender, Benjamin F., Detroit, Mich. Compound paste or mucilage	June 25, 1878	13	1130
5,533	Calvert, Frank, Lowell, Mass. Plasters	Jan. 22, 1878	13	126
5,858	Calvert & Co., J., Bordeaux, France. Wines and brandies	Apr. 16, 1878	13	677
5,490	Camp & Blair, Milford, Del. Dried or evaporated fruit	Jan. 8, 1878	13	48
5,860	Carpenter, Edwin P., Worcester, Mass. Organ mechanism or actions	Apr. 16, 1878	13	677
6,136	Carter Brothers & Co., Pittsburg, Pa. Baking-powder	May 25, 1878	13	970
6,192	Carter, Dinsmore & Co., Boston, Mass. Writing-ink	June 11, 1878	13	1047
6,193	Same Mucilage	June 11, 1878	13	1047
6,194	Same same	June 11, 1878	13	1047
6,355	Same Writing-fluid	July 16, 1878	14	86
6,398	Carter, Thomas, Oakland, Cal. Certain medicinal preparations	July 23, 1878	14	120
6,205	Cassebeer, Henry A., jr., New York, N. Y. Pharmaceutical preparations	June 11, 1878	13	1048
5,893	Caswell & Co., John, New York, N. Y. Cotton goods	Apr. 23, 1878	13	729
6,097	Caswell, Hazard & Co., New York, N. Y., and Newport, R. I. Medicinal preparation	May 21, 1878	13	917
6,669	Caterson, William M., Philadelphia, Pa. Medicinal preparation	Oct. 8, 1878	14	525
6,780	Catlin Tobacco Company. (See Cussen, William J., assignor.)			
6,429	Cereals Manufacturing Company, New York, N. Y. Infants' food	Nov. 5, 1878	14	680
5,837	Chambers, Henry, Louisville, Ky. Boneset bourbon tonic	July 30, 1878	14	160
5,003	Chambers, Robert M., Lynchburg, Va. Smoking-tobacco	Apr. 9, 1878	13	638
5,783	Chapin & Gore, Chicago, Ill. Champagne wine	May 7, 1878	13	819
6,803	Chapin, Sydney H., Garden City, N. Y. Medicinal preparation	Mar. 26, 1878	13	550
6,057	Chase & Co., Boston, Mass. Candy	Nov. 19, 1878	14	750
6,385	Chase & Co., E. H., Louisville, Ky. Whisky	May 14, 1878	13	871
6,695	Chase, Oliver Rice, Boston, Mass. Candy	July 23, 1878	14	120
6,770	Chemical Company of Canton, Canton, Md. Fertilizers	Oct. 8, 1878	14	526
6,041	Chesapeake Whisky Company, Brooklyn, N. Y. Whisky	Nov. 5, 1878	14	680
5,628	Chesebrough Manufacturing Company, New York and Brooklyn, N. Y. Emollient and remedial preparations of petroleum	May 14, 1878	13	871
5,629	Church & Co., New York, N. Y. Saleratus and soda	Feb. 12, 1878	13	277
6,558	Same Saleratus	Feb. 12, 1878	13	277
5,954	Same Saleratus and bicarbonate of soda	Sept. 10, 1878	14	380
5,847	Claffin, Larrabee & Co., Boston, Mass. Spool-cotton	Apr. 30, 1878	13	773
6,779	Clark & Co., Baltimore, Md. Liniment	Apr. 9, 1878	13	638
5,575	Clark, jr., & Co., John. (See Ferguson, Robert W., assignor.)			
6,096	Clark Thread Company, Newark, N. J. Spool-cotton	Nov. 5, 1878	14	680
6,263	Clarke, William E., Providence, R. I. Medicine for the cure of dropsy and like diseases	Sept. 17, 1878	14	416
5,875	Claudius, Charles, Canandaigua, N. Y. Cigars	May 21, 1878	13	917
6,085	Clerc, J. B., Bordeaux, France. Claret wines	June 18, 1878	13	1084
5,570	Cleveland Brothers, Albany, N. Y. Baking-powder			

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No.	Name, residence, and title.	Date.	Official Gazette.	
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6,556	Consolidated Fruit Jar Company, New Brunswick, N. J., and New York, N. Y. Oilers for lubricating machinery	Sept. 10, 1878	14	389
6,557	Consolidated Fruit Jar Company, New York, N. Y. Covers or caps for fruit-jars	Sept. 10, 1878	14	390
6,172	Coriell, Isaac, Baltimore, Md. Harness-blackening	June 4, 1878	13	102
6,790	Corning Glass Works, Corning, N. Y. Glassware	Nov. 12, 1878	14	716
5,848	Coussens & Tabler, Nashville, Tenn. Pile-ointment	Apr. 9, 1878	13	638
6,635	Same. Medical compound	Oct. 1, 1878	14	487
5,908	Cox & Co., S. J., Chelsea, Mass. Pile-cure	Apr. 23, 1878	13	723
5,918	Cox, George, Paterson, N. J. Lace articles and lace edgings	Apr. 23, 1878	13	729
6,027	Coyle, Laughlin & Co., Philadelphia, Pa. Coffee	May 7, 1878	13	829
6,311	Craft & Taylor, Detroit, Mich. Tonic	July 2, 1878	14	8
6,214	Cram & Mcleher, Chicago, Ill. Medicinal compound	June 11, 1878	13	1048
5,850	Crandall, Jesse A., Brooklyn, N. Y. Toys	Apr. 16, 1878	13	677
5,919	Crane Brothers, Westfield, Mass. Paper	Apr. 23, 1878	13	729
6,204	Crane, Hastings & Co., San Francisco, Cal. Whisky	June 25, 1878	13	1139
6,386	Creutzburg, George F., Philadelphia, Pa. Razors	July 23, 1878	14	120
6,328	Crossman & Brother, W. H., New York, N. Y. Refined petroleum	July 9, 1878	14	47
6,329	Same. Refined petroleum for illuminating purposes	July 9, 1878	14	48
6,854	Same. Axes and hatchets	Dec. 3, 1878	14	824
5,674	Crouse & Sons, Daniel, Utica, N. Y. Smoked or cured meats	Feb. 26, 1878	13	370
5,821	Crowell, James W., Philadelphia, Pa. Cigars	Apr. 2, 1878	13	593
6,413	Crozier, William, Northport, N. Y. Cow-milking devices	July 30, 1878	14	160
5,967	Cullingworth, Gregory & Ellison, Richmond, Va. Plug-tobacco	Apr. 30, 1878	13	773
6,028	Culp & Co., J. D., San Francisco, Cal. Cigars, cigarettes, and smoking and chewing tobacco	May 7, 1878	13	829
6,747	Culp & Co., James D., San Francisco, Cal. Cigars	Oct. 22, 1878	14	602
6,771	Cunningham, Curtiss & Welch, San Francisco, Cal. Writing-paper	Nov. 5, 1878	14	680
6,613	Curran & Co., A. D., Philadelphia, Pa. Caramels	Sept. 24, 1878	14	470
5,489	Curtis, Davis & Co., Boston, Mass. Soap	Jan. 8, 1878	13	38
6,040	Cussen, William J., Richmond, Va., assignor to Catlin Tobacco Company. Tobacco-bags	May 14, 1878	13	871
6,620	Cussen, William J., Richmond, Va. Tobacco-bags	Sept. 24, 1878	14	450
5,701	Cuthbert, Hamilton & Co., Philadelphia, Pa., and New York, N. Y. Teas	Mar. 5, 1878	13	410
5,514	Dabbs Brothers, Philadelphia, Pa. Bronchial troches, lozenges, or wafers	Jan. 15, 1878	13	11
5,483	Dally, Samuel, Brooklyn, N. Y. Bacon, hams, and cured and pickled meats	Jan. 8, 1878	13	33
6,717	Dameke, Ferdinand, New York, N. Y. Wash-blue	Oct. 15, 1878	14	562
6,169	Damon & Almy, Westvale, Mass. Shaker flannels	June 4, 1878	13	1012
6,570	Dare, Charles W. F., Brooklyn, N. Y. Toys and toy vehicles	Sept. 17, 1878	14	416
6,367	Darling, William Lee, New York, N. Y. Ice-cream and water-ices	July 16, 1878	14	86
5,839	Daughaday & Co., J. W., Philadelphia, Pa. Printing-presses	Apr. 9, 1878	13	633
5,618	Dausman & Drummond Tobacco Company, Alton, Ill. Plug chewing-tobacco	Feb. 5, 1878	13	222
6,058	Davids & Co., Thaddens, New York, N. Y. Writing fluid or ink	May 14, 1878	13	871
6,422	Davidson Rubber Company, Boston, Mass. Fine rubber goods	July 30, 1878	14	169
6,116	Davies, Henry J., Brooklyn, N. Y. Clocks	May 21, 1878	13	918
6,004	Davis, Chambers & Co., Pittsburg, Pa. White and red lead	May 7, 1878	13	819
6,232	Davis, Charles H. S. (See Schindler & Davis.)			
6,232	Davis & Co., W. C., Cincinnati, Ohio. Stoves and ranges	June 18, 1878	13	1033
6,845	Davis, John, West Bay City, Mich. Cologne-water	Nov. 26, 1878	14	738
5,637	Davison, Charles E., East Boston, Mass. Liniment	Feb. 19, 1878	13	326
6,403	Day & Frick, Philadelphia, Pa. Soap	Aug. 13, 1878	14	256
6,491	Same. same	Aug. 20, 1878	14	272
6,264	Dayton Leather and Collar Company, Dayton, Ohio. Horse-collars	June 18, 1878	13	1084
6,740	Deakin, Ann, Hartford, England. Salt	Oct. 22, 1878	14	602
6,740	Dean, Argus, Otto, Ind. Fruits	Sept. 24, 1878	14	470
6,028	Dean, William G., Brooklyn, N. Y. Mustard	Mar. 26, 1878	13	530
5,784	De Bary, Frederick, New York, N. Y. Oranges	Jan. 15, 1878	13	11
5,569	De Bretton, Joseph G., Desider Landing, La. Fever specific	Jan. 29, 1878	13	189
5,572	De Cordova, Charles, New York, N. Y. Medicinal preparation for the cure of headache	June 18, 1878	13	1084
6,246	De Land & Co., H. A., Fairport, N. Y. Saleratus, bicarbonate of soda, supercarbonate of soda, and sal-soda			
6,137	Delaney & Griffin, New York, N. Y. Lager-beer	May 28, 1878	13	970
6,414	Deming, William N., Providence, R. I. Remedies for catarrh, throat and pulmonary diseases	July 30, 1878	14	169
5,976	De Petterren, Henry Halkett, New York, N. Y. Medicinal preparations	Apr. 30, 1878	13	774
6,098	De Rojer, Catherine, Rochester, N. Y. Snuff	May 21, 1878	13	917
6,253	Detroit Skirt and Corset Company, Detroit, Mich. Skirts and corsets	June 18, 1878	13	1084
6,855	Detroit Stove Works, Detroit, Mich. Heating and cooking stoves	Dec. 3, 1878	14	124
6,435	Detwiler & Co., John S., Philadelphia, Pa. Wheaten grits	Aug. 6, 1878	14	206
5,534	Deutsch & Fuchs, New York, N. Y. Cigars and smoking-tobacco	Jan. 22, 1878	13	125
5,605	Dewey, Demas B., Brooklyn, N. Y. Liniment	Feb. 5, 1878	13	232
6,330	Dibble Manufacturing Company, Trenton, N. J. Articles of use and ornament made from a blood powder or mixture	July 9, 1878	14	48
6,810	Dick, Dundas, New York, N. Y. Medical compound	Nov. 19, 1878	14	750
5,920	Dietz, Robert E., New York, N. Y. Animal-traps	Apr. 23, 1878	13	729
5,984	Dill, Joseph G., Richmond, Va. Plug-tobacco	Apr. 30, 1878	13	774
5,658	Same. Chewing and smoking tobacco	Feb. 19, 1878	13	326
6,878	Same. same	Dec. 17, 1878	14	963
6,879	Same. same	Dec. 17, 1878	14	963
6,880	Same. same	Dec. 17, 1878	14	963
6,881	Same. same	Dec. 17, 1878	14	963
6,042	Distin, Henry, New York, N. Y. Brass-band instruments	May 14, 1878	13	871
5,655	Dixon Crucible Company, Joseph, Jersey City, N. J. Pens, pencils, and pen-holders	Feb. 12, 1878	13	274
6,486	Same. Graphite for stove-polish, &c	Aug. 20, 1878	14	272
6,312	Dole Brothers, Boston, Mass. Malt	July 2, 1878	14	8
6,010	Donaldson Brothers, New York, N. Y. Printed publications	Sept. 24, 1878	14	430
5,497	Double Thread Sewing Company, Boston, Mass. Articles of clothing	Jan. 8, 1878	13	48
5,498	Same. same	Jan. 8, 1878	13	48
5,499	Same. Boots and shoes	Jan. 8, 1878	13	48
5,500	Same. same	Jan. 8, 1878	13	48
6,741	Dreka, Louis, Media, Pa. Steel pens	Oct. 22, 1878	14	602
5,717	Dreydoppel, William, Philadelphia, Pa. Soap	Mar. 12, 1878	13	457
6,005	Driggs, Nathaniel S., and Winfield S. Lynn, Indianapolis, Ind. Medical preparation	May 7, 1878	13	819
5,571	Du Bois, Alonzo M., Cobden, Ill. Medical preparation	Jan. 29, 1878	13	189
6,206	Duke, Brodie L., Durham, N. C. Smoking-tobacco	June 11, 1878	13	1048
5,555	Duminy & Co., Ay, France. Champagne wine	Jan. 22, 1878	13	126
6,155	Dunham Hosiery Company, Naugatuck, Conn. Knitted or woven undershirts and under-drawers	May 23, 1878	13	970
6,059	Du Puy, Eugene A., Brooklyn, N. Y. Medicinal articles	May 14, 1878	13	871
6,431	Duval & Co., Henry, Baltimore, Md. Fertilizers	Aug. 6, 1878	14	236
6,117	Dwyer, J. Henry, Lynn, Mass. Burnishing ink	May 21, 1878	13	918

*List of trade-marks registered during the year 1878—Continued.*

No.	Name, residence, and title.	Date.	Official Gazette.	
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6, 118	Dwyer, J. Henry, Lynn, Mass. Burnishing-ink	May 21, 1878	13	918
6, 856	Dyer, Benjamin W., New York, N. Y. Healing compound	Dec. 3, 1878	14	824
6, 368	Eagle Cotton Gin Company, Bridgewater, Mass. Cotton-gins	July 16, 1878	14	86
5, 696	Eagle Pencil Company, New York, N. Y. Lead-pencils	Feb. 5, 1878	13	232
5, 850	Same	Apr. 9, 1878	13	638
6, 436	Eagle and Phenix Manufacturing Company, Columbus, Ga. Tickings	Aug. 6, 1878	14	206
6, 814	Eagle Preserved Fish Company, New York, N. Y. Canned fish	Nov. 19, 1878	14	750
6, 804	Earle, Ferdinand P., New York, N. Y. Cigars, cigarettes, and smoking and chewing tobacco	Nov. 19, 1878	14	750
6, 387	Early, Charles, Richmond, Va. Smoking-tobacco and cigarettes	July 23, 1878	14	120
6, 727	Eaton & Son, James, Utica, N. Y. Matches	Oct. 15, 1878	14	562
6, 207	Evanson & Sons, Jones, Philadelphia, Pa. Soap	June 11, 1878	13	1048
6, 160	Ecker & Co., Philadelphia, Pa. Soap	May 28, 1878	12	470
6, 127	Eddystone Manufacturing Company (limited), Chester and Philadelphia, Pa. Dry-goods	May 21, 1878	13	918
6, 157	Same	May 28, 1878	13	970
6, 457	Eddystone Manufacturing Company (limited), Philadelphia, Pa. Prints	Aug. 13, 1878	14	236
6, 458	Same	Aug. 13, 1878	14	236
6, 006	Eggert, Henry, New York, N. Y. Cigars	May 7, 1878	13	819
6, 062	Egyptian Embalmer Company, New York, N. Y. Embalming preparations	May 14, 1878	13	871
5, 996	Ehrlich & Co., New York, N. Y. Apparatus for curling hair	May 7, 1878	13	819
5, 467	Ehrman & Co., M., San Francisco, Cal., and New York, N. Y. Tea	Jan. 1, 1878	13	8
6, 195	Same	June 11, 1878	13	1047
6, 581	Ely Brothers (limited), London, England. Cartridges and percussion-caps	Sept. 17, 1878	14	416
6, 591	Same	Sept. 17, 1878	14	416
6, 790	Same	Nov. 12, 1878	14	716
5, 759	Elie, Simon, Bloomington, Ill. Cigars	Mar. 19, 1878	13	501
6, 050	Elkins, William L., Philadelphia, Pa. Lubricating and illuminating oils	May 14, 1878	13	871
6, 061	Same	May 14, 1878	13	871
6, 063	Same	May 14, 1878	13	871
6, 029	Elkinton, Joseph S. and Thomas, Philadelphia, Pa. Soap	May 7, 1878	13	820
6, 621	Elkinton, Thomas. (See Elkinton, Joseph S. and Thomas.)			
6, 683	Elliott, Kemp B., Norfolk, Va. Pea-nuts	Sept. 24, 1878	14	450
6, 710	Same	Oct. 8, 1878	14	525
6, 882	Ellison & Harvey, Richmond, Va. Whisky	Oct. 8, 1878	14	526
5, 876	Ely Brothers, Owego, N. Y. Medical compounds for the cure of catarrh and colds	Dec. 17, 1878	14	903
5, 556	Emerson, Smith & Co., Beaver Falls, Pa. Saws and files	Apr. 16, 1878	13	678
5, 491	Emory, Charles G., Brooklyn, N. Y. Smoking-tobacco and cigarettes	Jan. 22, 1878	13	126
6, 724	Empire Mill Company, Saint Louis, Mo. Flour	Jan. 8, 1878	13	48
6, 725	Engelbrecht, Fox & Co., San Francisco, Cal. Cigars and smoking and chewing tobacco	Oct. 15, 1878	14	562
6, 468	Same	Oct. 15, 1878	14	562
6, 513	Eppinger, Isaac, New York, N. Y. Plug-tobacco	Jan. 1, 1878	13	8
6, 591	Epps & Co., James, New York, N. Y., and London, England. Preparations of cocoa	Aug. 27, 1878	14	310
6, 820	Erie Preserving Company, Brant and New York, N. Y. Canned fruits and vegetables	Mar. 5, 1878	13	410
6, 898	Estabrook & Eaton, Boston, Mass. Cigars	Nov. 26, 1878	14	787
6, 899	Esterbrook Steel Pen Manufacturing Company, Camden, N. J. Pens	Dec. 17, 1878	14	904
6, 900	Same	Dec. 17, 1878	14	904
6, 901	Same	Dec. 17, 1878	14	904
6, 902	Same	Dec. 17, 1878	14	904
6, 903	Same	Dec. 17, 1878	14	904
6, 904	Same	Dec. 17, 1878	14	904
6, 905	Same	Dec. 17, 1878	14	904
6, 906	Same	Dec. 17, 1878	14	904
6, 907	Same	Dec. 17, 1878	14	904
6, 908	Same	Dec. 17, 1878	14	904
6, 909	Same	Dec. 17, 1878	14	904
6, 910	Same	Dec. 17, 1878	14	904
6, 911	Same	Dec. 17, 1878	14	904
6, 917	Same	Dec. 17, 1878	14	904
5, 591	Eureka Fire Hose Company, New York, N. Y. Hydraulic hose	Jan. 29, 1878	13	180
5, 592	Same	Jan. 29, 1878	13	180
5, 593	Same	Jan. 29, 1878	13	180
6, 479	Evans, Richard, Liverpool, England. Salt	Aug. 20, 1878	14	236
6, 492	Same	Aug. 20, 1878	14	272
6, 863	Excelsior Lye Company, Chicago, Ill. Lye in packages for domestic use	Dec. 3, 1878	14	824
6, 864	Same	Dec. 3, 1878	14	824
6, 865	Same	Dec. 3, 1878	14	824
5, 644	Faber, Eberhard, Port Richmond, N. Y. Lead-pencils	Feb. 12, 1878	13	278
5, 645	Same	Feb. 12, 1878	13	278
5, 646	Same	Feb. 12, 1878	13	278
6, 086	Fahys, Joseph, Brooklyn, N. Y. Watch-cases	May 14, 1878	13	872
6, 131	Fairbanks & Co., E. & T., Saint Johnsbury, Vt. Weighing-scales	May 28, 1878	13	969
6, 636	Same	Oct. 1, 1878	14	487
5, 469	Fairechild & Shelton, Bridgeport, Conn. Soap	Jan. 1, 1878	13	8
6, 196	Falk, John M., New York, N. Y. Medicinal preparations	June 11, 1878	13	1047
5, 535	Fanning, David H., Worcester, Mass. Corsets	Jan. 22, 1878	13	126
6, 805	Farber & Co., S. W., Alton, Ill. Flour	Nov. 19, 1878	14	750
6, 482	Farina, Johann Maria, Cologne, Germany. Cologne water	Aug. 20, 1878	14	272
6, 563	Same	Sept. 10, 1878	14	380
6, 564	Same	Sept. 10, 1878	14	380
6, 748	Farini, William, Westminster, England. Theatrical and gymnastic apparatus	Oct. 22, 1878	14	602
6, 883	Farquhar, Arthur B., York, Pa. Farm and agricultural implements, machines, and apparatus	Dec. 17, 1878	14	903
6, 272	Fay & Co., Boston, Mass. Cigars	June 25, 1878	13	1136
5, 862	Fehl & Co., G., Saint Louis, Mo. Cigars	Apr. 16, 1878	13	677
6, 247	Feigenspan & Co., Newark, N. J. Lager-beer	June 18, 1878	13	1084
5, 730	Felgner & Son, F. W., Baltimore, Md. Smoking and chewing tobacco and cigarettes	Mar. 12, 1878	13	437
6, 064	Fell, William J., Faulkland, Del. Coffee, spices, and mustard	May 14, 1878	13	871
6, 091	Same	May 21, 1878	13	917
6, 092	Same	May 21, 1878	13	917
6, 734	Ferguson, Robert W., New York, N. Y., assignor to John Clark, jr., & Co., Glasgow, Great Britain. Spool-cotton	Oct. 22, 1878	14	602
5, 594	Ferré, Jules, Paris, France. Medical preparations	Jan. 29, 1878	13	180
5, 595	Same	Jan. 29, 1878	13	180
5, 596	Same	Jan. 29, 1878	13	180
5, 713	Finch, Wells, New York, N. Y. Flour	Mar. 5, 1878	13	410
5, 877	Fink, Brother & Co., Baltimore, Md. Roasted and ground coffee	Apr. 16, 1878	13	678



*List of trade-marks registered during the year 1878—Continued.*

No.	Name, residence, and title.	Date.	Official Gazette.	
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5,476	Fischer & Lansing, New York, N. Y. Encaustic tiling.	Jan. 1, 1878	13	8
6,215	Fish, Clark & Flagg, New York, N. Y. Gloves.	June 11, 1878	13	1048
6,216	Same.	June 11, 1878	13	1048
6,039	Fitzpatrick, Davis & Co., Fisherton, Wash. Canned meat, fish, fruit, and vegetables.	May 7, 1878	13	820
5,921	Fitzpatrick, James G., New York, N. Y. Corsets and waists.	Apr. 23, 1878	13	729
6,432	Fitzpatrick, James G., New York, N. Y. Corset-clasps.	July 30, 1878	14	160
5,515	Flagg, Andrew J., Claremont, N. H. Cough and lung sirup.	Jan. 15, 1878	13	11
	Fleisher, M. (See Fleisher, S. B. & M.)			
6,208	Fleisher, S. B. & M., Philadelphia, Pa. Braid.	June 11, 1878	13	1048
6,295	Fleming, Walter M., New York, N. Y. Perfumes for the breath.	June 25, 1878	13	1130
6,559	Fletcher, A. M., and James McCoy, San Francisco, Cal. Paint.	Sept. 10, 1878	14	380
5,647	Fletcher, Charles M., Brooklyn, N. Y. Medicinal preparations of the cocoa-leaf.	Feb. 12, 1878	13	278
5,536	Fletcher Manufacturing Company, Providence, R. I. Kerosene-wick.	Jan. 22, 1878	13	126
6,785	Same. Lamp-wickings.	Nov. 12, 1878	14	716
6,030	Fletcher, Nathan Barnes, Lynn, Mass. Burnishing-ink.	May 7, 1878	13	820
6,483	Fogg & Co., H., New York, N. Y. Woven cotton and woolen fabrics.	Aug. 20, 1878	14	272
5,537	Folger & Co., J. A., San Francisco, Cal. Lemonade-powder.	Jan. 22, 1878	13	126
5,538	Same. Teas.	Jan. 22, 1878	13	126
5,539	Same. same.	Jan. 22, 1878	13	126
5,540	Same. same.	Jan. 22, 1878	13	126
6,784	Folsom & Co., N. T., Boston, Mass. Cleansing and polishing preparation.	Nov. 12, 1878	14	716
5,718	Forstyth & Co., W. R., Pittsburg, Pa. Baking-powder.	Mar. 12, 1878	13	457
5,811	Fox & Plant, Newark, N. J. Fancy dry-goods.	Apr. 2, 1878	13	598
6,007	Foxen, Newman & Co., Detroit, Mich. Cigars.	May 7, 1878	13	819
6,132	Same. same.	May 28, 1878	13	969
6,356	Frankfurth & Co., William, Milwaukee, Wis. Stove-polish.	July 16, 1878	14	86
6,496	Franklin Company, New York, N. Y. Medicinal preparation.	Aug. 20, 1878	14	272
6,149	Frazier, George W., Cleveland, Ohio. Pile-ointment.	May 28, 1878	13	970
	Frey, A. (See Frey, J. & A.)			
6,156	Frey, J. & A., New York, N. Y. Cigars.	May 28, 1878	13	970
6,119	Frishmuth, Brother & Co., Philadelphia, Pa. Chewing and smoking tobacco.	May 21, 1878	13	918
5,849	Früh, Carl D. S., Philadelphia, Pa. Mouth or tooth wash and tooth-powder.	Apr. 9, 1878	13	638
6,313	Fuget & Sons, S., Philadelphia, Pa. Cigars.	July 2, 1878	14	8
5,997	Same. same.	May 7, 1878	13	819
5,607	Fuller & Co., A. G., Danville, Va. Smoking and chewing tobacco, cigars, cigarettes, and snuff.	Feb. 5, 1878	13	232
5,659	Furey, Enos F., Camden, N. J. Medicinal preparation.	Feb. 19, 1878	13	326
5,517	Gaff & Co., James W., Cincinnati, Ohio. Compressed yeast.	Jan. 15, 1878	13	11
5,977	Gaff & Co., J. W., Cincinnati, Ohio. Whisky.	Apr. 30, 1878	13	774
6,263	Same. same.	July 16, 1878	14	86
5,516	Gail & Ax, G. W., Baltimore, Md. Smoking and chewing tobacco and cigars, cigarettes, and snuff.	Jan. 15, 1878	13	11
6,173	Same. same.	June 4, 1878	13	1012
6,369	Same. same.	July 16, 1878	14	86
6,037	Same. same.	Oct. 1, 1878	14	487
6,638	Same. same.	Oct. 1, 1878	14	487
6,639	Same. same.	Oct. 1, 1878	14	487
6,640	Same. same.	Oct. 1, 1878	14	487
6,641	Same. same.	Oct. 1, 1878	14	487
6,642	Same. same.	Oct. 1, 1878	14	487
6,643	Same. same.	Oct. 1, 1878	14	487
6,644	Same. Smoking-tobacco.	Oct. 1, 1878	14	487
6,645	Same. same.	Oct. 1, 1878	14	488
6,646	Same. Chewing and smoking tobacco, cigars, cigarettes, and snuff.	Oct. 1, 1878	14	488
6,647	Same. same.	Oct. 1, 1878	14	488
6,648	Same. same.	Oct. 1, 1878	14	488
6,649	Same. same.	Oct. 1, 1878	14	488
6,753	Same. Smoking-tobacco.	Oct. 29, 1878	14	636
5,735	Gale, Dolly Moulton, Worcester, Mass. Beautifier for the complexion.	Jan. 29, 1878	13	180
6,763	Gambrill, James H., Frederick, Md. Flour.	Jan. 29, 1878	14	636
5,608	Gantz, George F., New York, N. Y. Stove-polish and plumbago.	Feb. 5, 1878	13	232
6,248	Gardiner, James M., New York, N. Y. Smoking and chewing tobacco and snuff.	June 18, 1878	13	1084
	Gardner, William I. (See Orebaugh & Gardner.)			
5,484	Gem City Tobacco Works, Quincy, Ill. Plug chewing-tobacco.	Jan. 8, 1878	13	48
5,557	Same. same.	Jan. 22, 1878	13	126
6,120	George, Robertson F., Galveston, Tex. Sarsaparilla extracts.	May 21, 1878	13	918
6,016	Gere, R. Nelson, Geddes, N. Y. Salt.	May 7, 1878	13	819
6,684	German Harmonica Company, Shelburne Falls, Mass. Mouth-harmonicas.	Oct. 8, 1878	14	525
6,551	Gesswein, Frederick W., Jersey City Heights, N. J. Jewelers' tools and files.	Sept. 3, 1878	14	348
6,916	Ghirardelli, Domingo, San Francisco, Cal. Chocolate, broma, and cocoa.	Dec. 17, 1878	14	904
5,754	Gill, William P., Brooklyn, N. Y. Gros-grain ribbons.	Mar. 19, 1878	13	501
5,735	Gillen Brothers, Galesburg, Ill. Cigars.	Mar. 12, 1878	13	457
5,485	Gillespie Brothers & Co., Pittsburg, Pa. Oil-well supplies.	Jan. 8, 1878	13	48
5,731	Gillott & Sons, Joseph, Birmingham, England, and New York, N. Y. Steel pens.	Mar. 12, 1878	13	457
5,732	Same. same.	Mar. 12, 1878	13	457
5,733	Same. same.	Mar. 12, 1878	13	457
5,734	Same. same.	Mar. 12, 1878	13	457
6,176	Same. same.	June 4, 1878	13	1012
6,177	Same. same.	June 4, 1878	13	1012
6,178	Same. same.	June 4, 1878	13	1012
6,179	Same. same.	June 4, 1878	13	1012
6,180	Same. same.	June 4, 1878	13	1012
6,181	Same. same.	June 4, 1878	13	1012
5,880	Girard Wrench Manufacturing Company, Girard, Pa. Wrenches.	Apr. 16, 1878	13	678
6,846	Glacum & Schlosser, New York, N. Y. Cigars.	Nov. 26, 1878	14	788
5,879	Glazier, Franklin, Hartford, Conn. Cassimeres.	Apr. 16, 1878	13	678
6,437	Same. same.	Aug. 6, 1878	14	206
6,065	Goetz & Co., John P., Milwaukee, Wis. Cigars.	May 14, 1878	13	871
6,314	Goetzmann & Son, Rochester, N. Y. Soap.	July 2, 1878	14	8
6,847	Gold's Heater Manufacturing Company, New York, N. Y. Heaters for warming dwellings, &c.	Nov. 26, 1878	14	788
6,884	Goldstein, William, New York, N. Y. Boiler-scale eradicators.	Dec. 17, 1878	14	903
5,878	Goode, Thomas F., Boynton, Va. Mineral water.	Apr. 16, 1878	13	678
5,702	Goodwin & Co., New York, N. Y. Fine-cut chewing-tobacco.	Mar. 5, 1878	13	410
6,735	Same. Chewing and smoking tobacco, cigars, and cigarettes.	Oct. 22, 1878	14	692
6,791	Same. Smoking-tobacco and cigarettes.	Nov. 12, 1878	14	716
6,815	Same. Smoking and chewing tobacco, cigars and cigarettes.	Nov. 19, 1878	14	750

*List of trade-marks registered during the year 1878—Continued.*

No.	Name, residence, and title.	Date.	Official Gazette.	
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5,772	Goodwyn, Philo M., New Orleans, La. Yeast-powder	Mar. 19, 1878	13	501
6,185	Goodyear's Metallic Rubber Shoe Company, Naugatuck, Conn. Boots and shoes made wholly or in part of India rubber	June 4, 1878	13	1012
6,851	Gordon & Co., James, Sparta, Ill. Flour	Nov. 26, 1878	14	788
6,603	Gorfino Brothers, New York, N. Y. Cigarettes	Sept. 24, 1878	14	450
5,922	Gorrell, John G., Pesian, Ind. Burning-fluids	Apr. 23, 1878	13	729
6,547	Graham & Barbours, Carbondale, Ill. Flour	Sept. 3, 1878	14	348
6,548	Same same	Sept. 3, 1878	14	348
6,859	Graham & Haines, New York, N. Y. Pistols and guns	Dec. 3, 1878	14	824
5,840	Graham, J. C., Philadelphia, Pa. Woolen or worsted yarns	Apr. 9, 1878	13	638
6,736	Grant, Joseph C., Philadelphia, Pa. Baking-powders	Oct. 22, 1878	14	602
6,582	Graves, Chester H., Boston, Mass. Alcohol	Sept. 17, 1878	14	416
6,377	Green & Clark, Saint Louis, Mo. Cider	July 10, 1878	14	86
6,806	Greenbank Alkali Company (limited), St. Helen's, England. Potash and soda	Nov. 19, 1878	14	750
5,680	Greene & Co., William C., New York, N. Y. Wire and coral jewelry	Feb. 19, 1878	13	326
6,537	Greene, William, New York, N. Y. Harness-soap	Sept. 3, 1878	14	348
6,138	Greenebaum, Berthold, San Francisco, Cal. Overalls, jumpers, and garments of outside wear	May 28, 1878	13	970
5,622	Greenfield & Son, E., New York, N. Y. Candy	Feb. 5, 1878	13	332
5,955	Gregg, William H., Elmira, N. Y. Liniment	Apr. 30, 1878	13	773
6,707	Gregory, Stagg & Co., Saint Louis, Mo. Whisky	Oct. 8, 1878	14	526
6,871	Griffin & Co., San Francisco, Cal. Teas	Dec. 10, 1878	14	862
6,711	Grimes, Thomas, Providence, R. I. Beer	Oct. 8, 1878	14	526
6,139	Griswold, Catherine A., New York, N. Y. Ladies' corsets	May 28, 1878	13	970
6,331	Grodzinski, Goodman, Brooklyn, N. Y. Cigars, cigarettes, and smoking and chewing tobacco	July 9, 1878	14	48
5,968	Gross & Son, D. W., Harrisburg, Pa. Fluid chemical preparation for cleansing silk, &c.	Apr. 30, 1878	13	774
5,773	Grove, E. W., Paris, Tenn. Medicine for chills	Mar. 19, 1878	13	501
6,857	Guitard, Etienne, San Francisco, Cal. Roasted coffees, ground spices, pepper, and mustard	Dec. 3, 1878	14	824
6,858	Same Prepared chocolate	Dec. 3, 1878	14	824
6,286	Guttmann & Rice, New York, N. Y. Cigars	June 25, 1878	13	1130
5,802	Gutta Percha Paint Company, Cleveland, Ohio. Mixed paints	Apr. 2, 1878	13	508
6,197	Hadley Company, Boston, Mass. Thread	June 11, 1878	13	1047
6,121	Hagerty Brothers & Co., New York, N. Y. Nursing-bottles	May 21, 1878	13	918
6,848	Haight, Samuel, Ballston Spa, N. Y. Tanned leather	Nov. 20, 1878	14	758
5,620	Haines Brothers, New York, N. Y. Pianos	Feb. 5, 1878	13	232
5,518	Haines, Erasmus W., San Francisco, Cal. Medicine for horses	Jan. 15, 1878	13	11
6,648	Haines, John P., New York, N. Y. Polish for metals and glass	Feb. 12, 1878	13	278
6,680	Hall, Blair & Co., Brooklyn, N. Y. Cigars, cigarettes, and smoking and chewing tobacco	Oct. 8, 1878	14	525
6,822	Hall, Jerry R., Bay City, Mich. Sawed pine shingles	Nov. 26, 1878	14	787
5,704	Hall, Thomas H., New York, N. Y. Cigars, cigarettes, and smoking-tobacco	Mar. 5, 1878	13	410
5,710	Same same	Mar. 12, 1878	13	457
6,036	Same same	May 7, 1878	13	820
6,792	Same same	Nov. 12, 1878	14	716
5,502	Hall, William Henry, New York, N. Y. Toilet preparation	Jan. 15, 1878	13	10
6,333	Hamblet, James W., Brooklyn, N. Y. Tea	July 9, 1878	14	48
6,141	Hamilton Manufacturing Company, Lowell, Mass. Cotton fabrics	May 28, 1878	13	970
6,772	Hamilton, Robert, Covington, Ky. Fine-cut chewing-tobacco	Nov. 6, 1878	14	680
6,718	Hance Brothers & White, Philadelphia, Pa. Disinfecting chemical compound	Oct. 15, 1878	14	562
6,357	Hanford & Co., A., New York, N. Y. Whisky	July 16, 1878	14	86
6,378	Same same	July 16, 1878	14	86
6,583	Hannibal Meat Company (limited), Philadelphia, Pa., and Hannibal, Mo. Canned edibles	Sept. 17, 1878	14	416
6,584	Same same	Sept. 17, 1878	14	416
5,884	Hansen, Lewis G., New York, N. Y. Cotton yarn	Apr. 23, 1878	13	729
6,622	Harrington, Charles N., Cleveland, Ohio. Flour	Sept. 24, 1878	14	450
6,454	Harrington, Henry F., Versailles, Conn. Flour	Aug. 13, 1878	14	236
6,756	Harris Brothers, San Francisco, Cal. Cigars and cigarettes	Oct. 20, 1878	14	636
6,133	Hart, George S., New York, N. Y. Cheese	May 28, 1878	13	969
6,170	Same same	June 4, 1878	13	1012
5,532	Hauschildt, Frederick, New York, N. Y. Cigar-boxes	Sept. 3, 1878	14	348
6,577	Hautsch & Crouse, Reading, Pa. Cigars and cigarettes	Feb. 26, 1878	13	370
5,703	Hawley, Benjamin R., Hyde Park, Ill. Cook-stoves	Mar. 5, 1878	13	410
6,286	Hayes Brothers, Chicago, Ill. Soda-waters, seltzer-waters, and ginger-pop	June 25, 1878	13	1130
5,969	Hayes, James F., Philadelphia, Pa. Troches, lozenges, pills, pastilles, and similar preparations	Apr. 30, 1878	13	774
5,924	Haynes, Archibald C., Philadelphia, Pa. Worsted braid	Apr. 23, 1878	13	729
5,471	Heathman & Co., George W., Dayton, Ohio. Crackers, biscuits, or wafers	Jan. 1, 1878	13	8
5,675	Hecker & Co., George V., New York, N. Y. Flour	Feb. 20, 1878	13	370
5,676	Same same	Feb. 20, 1878	13	370
5,692	Same same	Mar. 5, 1878	13	410
5,774	Same same	Mar. 19, 1878	13	501
5,823	Same same	Apr. 2, 1878	13	598
5,828	Same same	Apr. 9, 1878	13	638
6,008	Same same	May 7, 1878	13	819
6,067	Same same	May 14, 1878	13	871
6,438	Same same	Aug. 6, 1878	14	206
6,764	Heilbronner & Josephs, New York, N. Y. Cigars	Oct. 20, 1878	14	636
5,736	Heim, Anton, New York, N. Y. Leather beltings and lacings	Mar. 12, 1878	13	457
9,404	Heinz, F. & J., Pittsburgh, Pa. Condiments, such as pickles, sauces, &c.	Aug. 13, 1878	14	236
	Heinz, J. (See Heinz, F. & J.)			
5,831	Heintzelman, Rush B., and Charles B. Coc, New York, N. Y. Medicines for the relief of catarrh, &c.	Apr. 9, 1878	13	638
6,887	Hellman, Louis, Chicago, Ill. Chemically-prepared wicks	Dec. 17, 1878	14	904
6,793	Henckell, Rudolph, Mainz-on-the-Rhine, Germany. Still and sparkling wines	Nov. 12, 1878	14	716
6,915	Hernsheim & Bro., S., New Orleans, La. Cigars, cigarettes, and smoking-tobacco	Dec. 17, 1878	14	904
5,705	Hess & Co., S. F., Rochester, N. Y. Smoking-tobacco	Mar. 5, 1878	13	410
5,978	Same Cigars	Apr. 30, 1878	13	774
6,043	Hetherington, John E., Cincinnati, Ohio, and New York, N. Y. Medicinal preparation	May 14, 1878	13	871
5,470	Hewins & Hollis, Boston, Mass. Suspenders and braces	Jan. 1, 1878	13	8
6,274	Heywood, Jennie, New York, N. Y. Medicinal preparation	June 25, 1878	13	1130
6,704	Hill & Co., H. W., Decatur, Ill. Tools and devices for ringing hogs	Oct. 8, 1878	14	526
5,841	Hilson, Edward, New York, N. Y. Cigars, cigarettes, and smoking and chewing tobacco	Apr. 9, 1878	13	638
6,500	Same same	Aug. 20, 1878	14	272
6,726	Same same Cigars, cigarettes, and chewing-tobacco	Oct. 15, 1878	14	562
6,757	Same same Cigars	Oct. 20, 1878	14	636
7,068	Hinkel, Frederick, Albany, N. Y. Lager-beer	May 14, 1878	13	872
6,275	Hirsch & Co., David, New York, N. Y. Cigars and cigarettes, and smoking and chewing tobacco	June 25, 1878	13	1130
6,306	Same same Cigarettes and smoking and chewing tobacco	July 2, 1878	14	8
6,307	Same same same	July 2, 1878	14	8



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No.	Name, residence, and title.	Date.	Official Gazette.	
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6,308	Hirsch & Co., David, New York, N. Y. Cigarettes and smoking and chewing tobacco	July 2, 1878	14	8
6,309	Same..... same	July 2, 1878	14	8
6,142	Hirsch, Joseph, New York, N. Y. Cigars	May 28, 1878	13	970
6,807	Same..... Cigars, cigarettes, and smoking and chewing tobacco	Nov. 19, 1878	14	750
6,343	Hirsch, Morris, Brooklyn, N. Y. Cigars, cigarettes, and smoking and chewing tobacco	July 9, 1878	14	48
6,808	Hirsch & Bendheim, Saint Louis, Mo. Cigars, cigarettes, and smoking and chewing tobacco	Nov. 10, 1878	14	750
6,885	Hirst, Penrose W., Camden, N. J. Borax soap	Dec. 17, 1878	14	903
6,696	Hiscox & Co., New York, N. Y. Ginger-tonic	Oct. 8, 1878	14	526
6,567	Hobson & Son, Francis, Sheffield, England. Cast-steel bars, plates, rods, and wire	Sept. 10, 1878	14	380
6,886	Hodgkins, Lorraine S., Brewer, Mo. Liniment	Dec. 17, 1878	14	904
5,804	Hodgman & Co., New York, N. Y. Rubber goods	Apr. 2, 1878	13	598
6,729	Hoffheimer Brothers, Cincinnati, Ohio. Gin	Oct. 15, 1878	14	562
6,568	Hoffman, Jacob, New York, N. Y. Lager-beer	Sept. 10, 1878	14	380
	Holland, C. G. (See Holland, J. W. & C. G.)			
5,493	Holland, J. W. & C. G., Danville, Va. Twist-tobacco	Jan. 8, 1878	13	48
5,851	Same.....Chewing-tobacco	Apr. 9, 1878	13	638
5,852	Same..... same	Apr. 9, 1878	13	638
5,853	Same..... Smoking and chewing tobacco	Apr. 9, 1878	13	638
5,854	Same.....Chewing-tobacco	Apr. 9, 1878	13	638
5,923	Same..... same	Apr. 23, 1878	13	729
5,574	Holman Liver Pad Company, New York, N. Y. Medicated salts	Jan. 29, 1878	13	180
6,140	Same..... Perforated plasters for medicinal purposes	May 28, 1878	13	970
5,803	Holmes & Co., New York, N. Y. Biscuit	Apr. 2, 1878	13	598
5,985	Hood, Bonbright & Co., Philadelphia, Pa. Dry-goods	Apr. 30, 1878	13	774
5,693	Hottel, Henry, and Lemuel Painter, Woodstock, Va. Flour	Mar. 5, 1878	13	410
5,492	Houghton & Co., E. F., Philadelphia, Pa. Medical preparation	Jan. 8, 1878	13	48
6,821	Same..... Medical preparation	Nov. 26, 1878	14	787
6,560	Household Medicine Company, Florence, N. J. Medical preparation	Sept. 10, 1878	14	380
6,388	Howard Brothers, Fredonia, N. Y. Medicinal preparation for the cure of coughs, colds, &c	July 23, 1878	14	120
	Howard, Clarence M. (See Howard, Edward D. and Clarence M.)			
5,720	Howard, Edward D. and Clarence M., Fredonia, N. Y. Watches	Mar. 12, 1878	13	457
5,721	Same..... same	Mar. 12, 1878	13	457
6,174	Howard, Hamilton H., Rochester, N. Y. Beverages from lime-fruit	June 4, 1878	13	1012
6,175	Same..... Dye-stuffs	June 4, 1878	13	1012
6,198	Howard, Rufus L., Buffalo, N. Y. Paper-cutting machines	June 11, 1878	13	1047
6,265	Howard, Sanger & Co., New York, N. Y. Combs	June 18, 1878	13	1084
6,054	Howe & French, Boston, Mass. Isinglass	May 14, 1878	13	871
5,630	Hoyt & Co., E. W., Lowell, Mass. Cologne	Feb. 12, 1878	13	277
5,661	Hoyt & Co., W. A., Boston, Mass. Cologne	Feb. 19, 1878	13	326
6,389	Hubbard, Thomas D., Columbus, Ohio. Grocers' wrapping-paper	July 23, 1878	14	120
6,332	Huckins, James H. W., Boston, Mass. Canned soup, meats, fish, and fowl	July 9, 1878	14	48
6,066	Huestis & Dusenberry, Troy, N. Y. Linen collars and cuffs	May 14, 1878	12	871
6,233	Hughes, Hugh G., Poultney, Vt. Roofing-slate	June 18, 1878	14	1083
6,053	Hull, Charles B., Detroit, Mich. Fine-cut chewing-tobacco	May 14, 1878	13	871
5,925	Humphreys, Frederick, New York, N. Y. Medicinal preparations of witch-hazel	Apr. 23, 1878	13	730
5,541	Hunnell & Co., J. W., Boston, Mass. Refined petroleum	Jan. 22, 1878	13	126
6,221	Hunt, William, Maysville, Ky. Cigars	June 11, 1878	13	1048
6,287	Hurst, Miller & Co., Baltimore, Md. Boots and shoes	June 25, 1878	12	1130
6,670	Hutchinson & Son, W. H., Chicago, Ill. Soda-waters, seltzer-waters, ginger-pop, and mineral waters	Oct. 8, 1878	14	525
5,649	Hutter, Karl, New York, N. Y. Bottle-stoppers	Feb. 12, 1878	12	278
6,811	Hyers, George A., Chicago, Ill. Stove and shoe polish	Nov. 19, 1878	14	750
5,486	Hyman, Nathan, New York, N. Y. Corsets and corset-clasps	Jan. 8, 1878	13	48
6,712	Indian Cordial Company, New Orleans, La. Medical compound	Oct. 8, 1878	14	526
6,836	Ingles, Frank, Detroit, Mich. Medicinal preparation	Nov. 26, 1878	14	788
5,479	Iron Clad Paint Company, Cleveland, Ohio. Paints	Jan. 1, 1878	13	8
5,881	Irwin, Annie E., Brooklyn, N. Y. Fine-cut chewing-tobacco and cigars	Apr. 16, 1878	12	678
6,350	I. X. L. Stove Polish Company, Grand Rapids, Mich. Stove-polish	July 9, 1878	14	48
6,071	Jackson, Charles H., Providence, R. I. Prepared clams	Oct. 8, 1878	14	525
5,526	Jackson Company, Nashua, N. H. Cotton sheetings, shirtings, and other cotton goods	Jan. 15, 1878	13	11
5,527	Same..... same	Jan. 15, 1878	13	11
5,737	Jacobs, William H., Hamilton, Ohio. Cough-mixtures	Mar. 12, 1878	12	458
6,488	Jacoby & Co., J. C., New York, N. Y. Stove-polish	Aug. 20, 1878	14	272
5,944	Jacoby & Co., S., New York, N. Y. Cigars, cigarettes, and smoking and chewing tobacco	Apr. 23, 1878	13	730
5,956	Same..... same	Apr. 30, 1878	13	773
6,424	Same..... Cigars	July 30, 1878	14	160
6,573	Same..... Cigars, cigarettes, and smoking and chewing tobacco	Sept. 17, 1878	14	416
6,614	Same..... same	Sept. 24, 1878	14	450
5,979	Jacoby, Morris, New York, N. Y. Cigars, cigarettes, and smoking-tobacco	Apr. 30, 1878	13	774
6,742	Same..... Cigars	Oct. 22, 1878	14	602
5,525	Jacocks & Co., George M., New York, N. Y. Spool-thread	Jan. 15, 1878	13	11
6,032	Jaff & Sohn, Joseph, Vienna, Austria. Buttons	May 7, 1878	13	820
6,031	Jaffe & Pinkus, O., New York, N. Y. Linen goods	May 7, 1878	13	820
5,523	Jayne & Son, D., Philadelphia, Pa. Medical preparation	Jan. 15, 1878	13	11
5,524	Same..... same	Jan. 15, 1878	13	11
5,738	Same..... Medicinal preparation	Mar. 12, 1878	13	458
5,739	Same..... same	Mar. 12, 1878	13	458
5,740	Same..... same	Mar. 12, 1878	13	458
5,741	Same..... same	Mar. 12, 1878	13	458
5,742	Same..... same	Mar. 12, 1878	13	458
5,743	Same..... same	Mar. 12, 1878	13	458
5,609	Jenkins, Thomas C., Pittsburg, Pa. Coffee	Feb. 5, 1878	13	232
5,610	Same..... same	Feb. 5, 1878	13	232
5,694	Jenkins & Son, T. Robert, Baltimore, Md. Lard	Mar. 5, 1878	13	410
6,334	Same..... same	July 9, 1878	14	48
5,542	Jenney, Walter P., Brooklyn, N. Y. Leather-dressing	Jan. 22, 1878	13	126
6,585	Jervy, William E., New York, N. Y. Hair-tonic	Sept. 17, 1878	14	416
6,666	Same..... Hair-tonics	Oct. 1, 1878	14	468
6,874	Jesson & Hanifen, Philadelphia, Pa. Hosiery and knit goods	Dec. 10, 1878	14	892
6,258	Jewett & Co., Sherman S., Buffalo, N. Y. Cooking-stoves	June 18, 1878	13	1084
6,259	Same..... same	June 18, 1878	13	1084
6,276	Same..... Parlor-stoves	June 25, 1878	13	1130
6,466	Same..... Wood heating-stoves	Aug. 13, 1878	14	226
6,475	Same..... Cooking-stoves	Aug. 30, 1878	14	226
6,476	Same..... Wood heating-stoves	Aug. 30, 1878	14	226
6,520	Jewett & Sherman Company, Milwaukee, Wis. Baking and yeast powder	Aug. 27, 1878	14	310

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5,998	Jocelyn, Albert H., New York, N. Y. Silicate erasable-surface material for memorandum-books, &c	May 7, 1878	13	819
5,760	Johns, Henry W., Brooklyn, N. Y. Material for covering roofs, steam-boilers, and pipes, composed wholly or in part of asbestos.	Mar. 19, 1878	13	501
6,672	Johnson & Brother, S. M., New York, N. Y. Smoking-tobacco.	Oct. 8, 1878	14	525
6,423	Johnston, John H., New York, N. Y. Jewelry and silver and plated ware	July 30, 1878	14	160
5,686	Joly, Charles, Philadelphia, Pa. Lager-beer	Feb. 26, 1878	13	370
6,015	Jones, Francis, Utica, N. Y. Smoking and chewing tobacco, cigars, cigarettes, and snuff.	Sept. 24, 1878	14	453
6,465	Judd Brothers Yeast Company, Detroit, Mich. Dry hop-yeast.	Aug. 13, 1878	14	236
6,540	Judson & Fontaine Pin Works, Rochester, N. Y. Pins	Sept. 3, 1878	14	348
6,541	Same	Sept. 3, 1878	14	348
6,542	Same	Sept. 3, 1878	14	348
6,348	Jurgiebewicz, Wladislaw L., New Orleans, La. Anti-rheumatic mixture.	July 9, 1878	14	48
5,882	Justi, Henry D., Philadelphia, Pa. Dental supplies.	Apr. 16, 1878	13	678
5,472	Kaufmann Brothers & Bondy, New York, N. Y. Cigars.	Jan. 1, 1878	13	8
5,744	Keefe, Joseph I., Philadelphia, Pa. Soap, candles, and borax	Mar. 12, 1878	13	458
5,909	Keller, Wilmer L., Baltimore, Md. Medical preparation.	Apr. 23, 1878	13	729
6,087	Kelley, P. H., Indianapolis, Ind. Cologne	May 14, 1878	13	872
7,077	Kellogg, George A., Brooklyn, N. Y. Preparation for removing freckles	May 14, 1878	13	872
5,785	Kelly, James Y., Georgetown, Ky. Tonic bitters	Mar. 26, 1878	13	550
6,450	Kendall, George W., New Orleans, La. Baking-powder	Aug. 6, 1878	14	206
6,840	Kendall, Josiah F., North Tarrytown, N. Y. Medicinal preparation	Nov. 26, 1878	14	788
6,455	Kenly, Jenkins & Young, Chicago, Ill. Flour	Aug. 13, 1878	14	236
7,069	Kennedy, George G., Boston, Mass. Medicines	May 14, 1878	13	872
6,843	Kenny & McPartland, New York, N. Y. Shoes	Nov. 26, 1878	14	788
6,533	Kent & Co., Geo. A., Binghamton, N. Y. Cigars.	Sept. 3, 1878	14	348
6,390	Kent, Robert R., East Boston, Mass. Remedy for sea-sickness	July 23, 1878	14	120
6,501	Keppeler & Schwarzmann, New York, N. Y. Printed publications	Aug. 20, 1878	14	272
5,558	Kerbs & Spiess, New York, N. Y. Cigars, cigarettes, and smoking and chewing tobacco	Jan. 22, 1878	13	126
5,575	Same	Jan. 20, 1878	13	180
5,576	Same	Jan. 20, 1878	13	180
5,577	Same	Jan. 20, 1878	13	180
5,578	Same	Jan. 20, 1878	13	180
5,579	Same	Jan. 20, 1878	13	180
5,580	Same	Jan. 20, 1878	13	180
5,581	Same	Jan. 20, 1878	13	180
5,582	Same	Jan. 20, 1878	13	180
5,583	Same	Jan. 20, 1878	13	180
5,584	Same	Jan. 20, 1878	13	180
5,585	Same	Jan. 20, 1878	13	180
5,808	Same	Apr. 2, 1878	13	598
5,832	Same	Apr. 9, 1878	13	638
5,957	Same	Apr. 30, 1878	13	773
6,297	Same	June 25, 1878	13	1150
6,493	Same	Aug. 20, 1878	14	272
6,678	Same	Oct. 8, 1878	14	525
6,494	Kerr, James C., Cincinnati, Ohio. Medicinal preparation	Aug. 20, 1878	14	272
6,704	Keuffel & Esser, New York, N. Y. Drawing-paper	Nov. 12, 1878	14	710
5,999	Keyou & Son, J. M., Medford, Mass. Hair-restoratives	May 7, 1878	13	819
6,538	Kimberly Brothers, Baltimore, Md. Canned meats	Sept. 3, 1878	14	348
6,316	Kimberly, George L. S., Baltimore, Md. Mineral water, seltzer, soda-water, and the like liquids	July 2, 1878	14	8
5,910	King, Oscar, New York, N. Y. Compressed yeast	Apr. 23, 1878	13	729
6,315	Kingsford & Son, T., Oswego, N. Y. Corn-starch	July 2, 1878	14	8
6,335	Kingland, Ferguson & Co., Saint Louis, Mo. Cotton-presses	July 9, 1878	14	48
6,823	Same	Nov. 26, 1878	14	787
5,966	Kirk & Co., James S., Chicago, Ill. Soap	Apr. 30, 1878	13	774
5,967	Same	Apr. 30, 1878	13	774
5,988	Same	Apr. 30, 1878	13	774
6,713	Klemm, Charles H., Baltimore, Md. Cigars, cigarettes, and smoking and chewing tobacco	Oct. 8, 1878	14	526
6,773	Klinck, Christian, Buffalo, N. Y. Hams, shoulders, and bacon	Nov. 5, 1878	14	680
6,234	Kloman, Park & Co., Pittsburg, Pa. Axes	June 18, 1878	13	1083
6,786	Knight, B. B. & R., Providence, R. I. Cotton sheetings and shirtings	Nov. 12, 1878	14	710
5,503	Knight, R. (see Knight, B. B. & R.)			
5,597	Knowles, Taylor & Knowles, East Liverpool, Ohio. Earthenware	Jan. 15, 1878	13	10
5,572	Kreischer, Jacob, Albany, N. Y. Confectionery	Jan. 29, 1878	13	180
5,755	Krohn, Feiss & Co., Cincinnati, Ohio. Cigars	Sept. 17, 1878	14	410
5,756	Krug & Co., Reims, France. Champagne wine	Mar. 10, 1878	13	501
6,122	Same	Mar. 10, 1878	13	501
6,758	Lake Shore Watch Company, Fredonia, N. Y. Watches	May 21, 1878	13	918
5,745	Landon, A. & M., Paris, France. Toilet preparation	Oct. 29, 1878	14	636
6,235	Lang, Marius, Brooklyn, N. Y. Cordials	Mar. 12, 1878	13	458
6,719	Langdon Manufacturing Company, Manchester, N. H. Cotton piece-goods	June 18, 1878	13	1083
6,502	Lanman, John T., New London, Conn. Perfumery	Oct. 15, 1878	14	562
5,623	Lansing, John A., Brookline, Mass. Cologne	Aug. 20, 1878	14	272
5,521	Lanterman & Stewart, Grayville, Ill. Flour	Feb. 5, 1878	13	232
5,835	Larrabee & Co., E. J., Albany, N. Y. Biscuits	Jan. 15, 1878	13	11
5,836	Same	Apr. 16, 1878	13	677
6,277	Same	Apr. 10, 1878	13	677
6,425	Lauferty, Emanuel, New York, N. Y. Lye and potash	June 25, 1878	13	1150
6,317	Leutz Brothers & Co., Buffalo, N. Y. Soap	July 30, 1878	14	160
6,009	Leaman, A. (See Leaman, W. & A.)			
6,824	Leaman, W. & A., New York, N. Y. Plug chewing-tobacco	July 2, 1878	14	8
5,842	Lee & Sturges, New York, N. Y. Rags and paper stock	May 7, 1878	13	819
5,842	Leet, Charles D., Fairfield, Conn., assignor to Schuyler, Hartley & Graham, New York, N. Y. Gun implements	Nov. 26, 1878	14	787
5,884	Leidersdorf & Co., B., Milwaukee, Wis. Smoking-tobacco	Apr. 9, 1878	13	638
5,504	Same	Apr. 16, 1878	13	678
5,505	Same	Aug. 20, 1878	14	272
5,501	Same	Aug. 20, 1878	14	272
6,629	Same	Sept. 10, 1878	14	380
5,443	Same	Sept. 24, 1878	14	459
6,521	Letson, Robert, Brooklyn, N. Y. Preparation of magnesia	Jan. 22, 1878	13	120
6,503	Levesque, Adolphus, Brooklyn, N. Y. Paints and colors	Aug. 27, 1878	14	310
6,550	Levy Brothers, New York, N. Y. Cigars, cigarettes, and smoking-tobacco	Aug. 20, 1878	14	272
6,551	Same	Feb. 12, 1878	13	278
6,551	Same	Feb. 12, 1878	13	278

*List of trade-marks registered during the year 1878—Continued.*

No.	Name, residence, and title.	Date.	Official Gazette.	
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6,250	Lewis & Co., P. S., Saint Louis, Mo. Wine	June 18, 1878	13	1066
6,685	Lewis, William H., Newton, assignor to National Steamed Grain Company, Boston, Mass. Steamed and dried grain	Oct. 8, 1878	14	535
5,473	Libby, Cyrus, Chicago, Ill. Shoes	Jan. 1, 1878	13	8
5,550	Lichtenstein & Brother, A., New York, N. Y. Cigars and cigarettes	Jan. 22, 1878	13	126
5,528	Same	Sept. 8, 1878	14	348
5,899	Lichtenstein Brothers & Co., New York, N. Y. Cigars, cigarettes, chewing and smoking tobacco, and snuff	Apr. 23, 1878	13	729
5,900	Same	Apr. 23, 1878	13	729
5,652	Lieber Brothers & Co., San Francisco, Cal. Cigars	Feb. 12, 1878	13	278
5,653	Same	Feb. 12, 1878	13	278
6,667	Same	Oct. 1, 1878	14	488
6,391	Liggett & Myers Company, Saint Louis, Mo. Plug-tobacco	July 23, 1878	14	120
6,358	Lillenthal & Co., New York, N. Y., Cincinnati, Ohio, and San Francisco, Cal. Whiskies	July 16, 1878	14	86
6,484	Limley, Ezra H., Saint Louis, Mo. Shovels and scoops	Aug. 20, 1878	14	272
5,883	Lisner, George, New York, N. Y. Gloves	Apr. 16, 1878	13	678
6,546	List, Daniel C., Jr., Wheeling, W. Va. Hams, tongues, shoulders, breakfast-bacon, and lard	Sept. 2, 1878	14	848
6,249	Lockwood Company, Waterville, Me., and Providence, R. I. Cotton goods	June 18, 1878	13	1084
5,495	Loefer, Frederick, Brooklyn, N. Y. Semi-tropical fruits	Jan. 8, 1878	13	48
5,920	Loewenherz, Joseph, Hoboken, N. J. Cigars, cigarettes, and smoking-tobacco	Apr. 23, 1878	13	730
5,544	Loker Tobacco Company, Saint Louis, Mo. Plug-tobacco	Jan. 22, 1878	13	126
5,611	Same	Feb. 5, 1878	13	232
6,109	Lomax, John A., Chicago, Ill. Mineral waters	June 11, 1878	13	1047
7,072	London Manufacturing Company, New York, N. Y. Essence of meats	May 14, 1878	13	872
6,099	Loomis, John D., Suffield, Conn. Cigars	May 21, 1878	13	917
6,100	Same	May 21, 1878	13	917
6,101	Same	May 21, 1878	13	917
6,010	Same	May 7, 1878	13	819
7,071	Lord & Taylor, New York, N. Y. Millinery goods	May 14, 1878	13	872
6,674	Lovell & Gedge, Covington, Ky. Plug chewing-tobacco	Oct. 8, 1878	14	525
6,278	Low & Brothers, A. A., New York, N. Y. Cotton jeans, drills, sheetings, and shirtings	June 25, 1878	13	1130
6,002	Lowenthal & Co., S., Cincinnati, Ohio. Cigars	May 7, 1878	13	819
6,529	Same	Sept. 3, 1878	14	848
5,494	Lown, Warren J., Washington, D. C. Roasted and ground coffee	Jan. 8, 1878	13	48
6,044	Lozano, Pendas & Co., New York, N. Y. Cigars, cigarettes, and smoking and chewing tobacco	May 14, 1878	13	871
6,045	Same	May 14, 1878	13	871
6,611	Lubrecht, Charles, Brooklyn, N. Y. Perfumes	Sept. 24, 1878	14	450
5,786	Luka, Emil C., Shenandoah, Pa. Medicinal preparation	Mar. 26, 1878	13	550
6,364	Lynde & Hough, San Francisco, Cal. Cod-fish	July 10, 1878	14	86
	Lynn, Winfield S. (See Driggs & Lynn.)			
6,241	Lyon, Amasa, New York, N. Y. Umbrellas and parasols	June 18, 1878	13	1083
6,182	MacDonald, John H., Stapleton, N. Y. Lubricating-grease	June 4, 1878	13	1012
6,477	Macdon & Barkley, Petersburg, Va. Smoking and chewing tobacco	Aug. 30, 1878	14	236
6,134	Maegerlein & Son, Carl, Chicago, Ill. Prepared skins for racking beer	May 28, 1878	13	909
5,757	Maillard, Henry, New York, N. Y. Cocoa	Mar. 10, 1878	13	501
6,266	Mallory, Wheeler & Co., New Haven, Conn. Locks and builders' hardware	June 18, 1878	13	1084
6,506	Mann, Henry A., jr., Ballston Spa, N. Y. Paper collars and cuffs	Aug. 20, 1878	14	272
6,159	Mann, William, Haddonfield, N. J. Copying-paper and copying-books	May 28, 1878	13	970
6,143	Marburg Brothers, Baltimore, Md. Smoking and chewing tobacco	May 28, 1878	13	970
6,217	Same	June 11, 1878	13	1048
6,872	Same	Dec. 10, 1878	14	862
5,901	Markley, Alling & Co., Chicago, Ill. Axes	Apr. 23, 1878	13	729
6,781	Marsching & Co., J., New York, N. Y. Bronze paints	Nov. 5, 1878	14	680
7,073	Marshall, David, Carthage, Ind. Medicinal preparations	May 14, 1878	13	872
6,014	Martin & Co., E. Remy, Rouillac, France. Brandy	May 7, 1878	13	819
6,101	Martinez, Joseph, Mobile, Ala. Cigars	May 28, 1878	13	970
6,344	Marvin & Co., S. S., Pittsburg, Pa. Flour	July 9, 1878	14	48
6,346	Same	July 9, 1878	14	48
6,347	Same	July 9, 1878	14	48
5,613	Mason Company, James S., Philadelphia, Pa. Blacking	Feb. 5, 1878	13	232
6,675	Massa, Samuel B., Brooklyn, N. Y. Paper	Oct. 8, 1878	14	525
6,209	Matchett, Richard, Allegheny, Pa. Liniments	June 11, 1878	13	1048
5,652	Mauger, Victor E., New York, N. Y. Medicinal capsules	Feb. 10, 1878	13	326
5,663	Same	Feb. 10, 1878	13	326
5,870	Same	Apr. 16, 1878	13	678
6,531	Same	Sept. 3, 1878	14	348
5,980	Mauran, John T., Providence, R. I. Jewelry	Apr. 30, 1878	13	774
6,774	Mayer Brothers, New Orleans, La. Cigars and cigarettes	Nov. 5, 1878	14	680
6,775	Same	Nov. 5, 1878	14	680
5,545	Mayer, Daniel A., New York, N. Y. Wines	Jan. 22, 1878	13	126
6,574	Mayo & Brother, P. H., Richmond, Va. Plug chewing-tobacco	Sept. 17, 1878	14	416
6,554	Mayo & Co., Henry, Boston, Mass. Boned cod-fish	Sept. 3, 1878	14	348
6,237	Mayo, William F., Chelsea, Mass. Boots and shoes	June 18, 1878	13	1083
5,624	McCarthy, John D., Augusta, Ga. Medical compound	Feb. 5, 1878	13	232
6,819	McCobb, Henry, New York, N. Y. Preparations of cocoa and chocolate	Nov. 26, 1878	14	787
5,464	McCoy & Co., New York, N. Y. Cigars, cigarettes, and smoking and chewing tobacco	Jan. 1, 1878	13	8
5,465	Same	Jan. 1, 1878	13	8
5,474	Same	Jan. 1, 1878	13	8
5,501	Same	Jan. 22, 1878	13	126
5,562	Same	Jan. 22, 1878	13	126
5,613	Same	Feb. 5, 1878	13	232
6,102	Same	May 21, 1878	13	917
6,260	Same	June 18, 1878	13	1084
	McCoy, James. (See Fletcher & McCoy.)			
6,800	McKelway, George L., Philadelphia, Pa. Cod-liver oil	Nov. 12, 1878	14	716
6,200	McKeone, Son & Co., Charles, Philadelphia, Pa. Soap	June 11, 1878	13	1047
6,517	McLaren, William D., Montreal, Quebec, Canada. Baking-powder	Aug. 27, 1878	14	310
5,546	McMurray, Louis, Baltimore, Md. Preserved green corn	Jan. 22, 1878	13	126
6,106	McNamara & Co., P., Covington, Ky. Plug chewing-tobacco	May 21, 1878	13	918
6,681	Mead, M.-ville E., Darien, Conn. Medicinal preparations	Oct. 8, 1878	14	525
6,011	Megler & Co., J. G., Brookfield, Wash. Canned meats and fish	May 7, 1878	13	819
6,012	Same	May 7, 1878	13	819
	Mehurin, Oscar C. (See Mehurin, Oscar F. and Oscar C.)			
6,569	Mehurin, Oscar F. and Oscar C., Zanesville, Ohio. Open fire-places and stoves	Sept. 10, 1878	14	380
6,038	Melcer, Aloys, Brooklyn, N. Y. Toys	May 14, 1878	13	872
5,547	Melzer & Co., R., Evansville, Ind. Soap	Jan. 22, 1878	13	126

## List of trade-marks registered during the year 1878—Continued.

No.	Name, residence, and title.	Date.	Official Gazette.	
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6,841	Mercer, Nathan, Montreal, Quebec, Canada. Medical compounds	Nov. 26, 1878	14	788
6,888	Merchant, Stephen L., New York, N. Y. Portland cement	Dec. 17, 1878	14	904
6,255	Merchants' Tobacco Company, Boston, Mass. Plug-tobacco	June 18, 1878	13	1084
6,842	Merritt, Benjamin F., New York, N. Y. Sparkling russet cider	Nov. 26, 1878	14	788
5,528	Merwin, William R., Detroit, Mich. Medicine	Jan. 15, 1878	13	11
6,390	Mesplé, Toussaint, Washington, D. C. Bitters	July 16, 1878	14	86
6,530	Messinger, Charles R., Toledo, Ohio. Smoking-tobacco	Sept. 3, 1878	14	248
5,793	Meyer Brothers & Co., Saint Louis, Mo. Toilet and other brushes	Mar. 26, 1878	13	550
5,863	Meyer & Dickinson, Philadelphia, Pa. Ribbons	Apr. 10, 1878	13	677
6,728	Meyer, Henry W., Brooklyn, N. Y. Smoking and chewing tobacco	Oct. 15, 1878	14	562
6,094	Miami Powder Company, Xenia, Ohio. Gunpowder for sporting purposes	May 21, 1878	13	917
5,590	Middlesex Company, Lowell, Mass. Casalmere	Jan. 22, 1878	13	120
6,037	Milco, Giovanni N., Stockton, Cal. Insect-destroying powder	May 7, 1878	13	820
6,267	Miles, John E., San Francisco, Cal. Coal-oil	June 18, 1878	13	1084
5,632	Miller & Co., D., New York, N. Y. Ruffing	Feb. 12, 1878	13	278
5,654	Miller, Frederic A., Philadelphia, Pa. Medicines for horses, cattle, and poultry	Feb. 12, 1878	13	278
6,586	Miller, Metcalf & Parkin, Pittsburg, Pa. Car-springs	Sept. 17, 1878	14	416
6,013	Miller & Son, Jacob, Philadelphia, Pa. Shirts, overalls, and underwear	May 7, 1878	13	819
6,251	Miner & Co., A. W., Belmont, N. Y. Hay-rake	June 18, 1878	13	1084
5,885	Minot, Hooper & Co., New York, N. Y. Woven cotton fabrics	Apr. 10, 1878	13	678
6,579	Mintie, Alexander E., San Francisco, Cal. Medicinal preparation	Sept. 17, 1878	14	416
6,587	Same	Sept. 17, 1878	14	416
6,318	Mohr, Mohr & Co., Cincinnati, Ohio. Whisky	July 2, 1878	14	8
6,098	Moonella, Adolph, New York, N. Y. Cigars and cigarettes	Oct. 8, 1878	14	526
	Moore, Edward Y., et al. (See Smith, Shadrach T., assignor.)			
	Moore, Samuel H., et al. (See Smith, Shadrach T., assignor.)			
	Morten, Eugene C. (See Morten, Frank M. and Eugene C.)			
7,074	Morten, Frank M., and Eugene C., Cincinnati, Ohio. Chewing-tobacco	May 14, 1878	13	872
6,861	Morris, Henry M., Brooklyn, N. Y. Cigars, cigarettes, and smoking-tobacco	Dec. 3, 1878	14	824
5,631	Morris, John Harper, Richmond, Va. Fluids for preventing incrustation in steam-boilers	Feb. 12, 1878	13	278
6,889	Morse & Co., C. H., Rochester, N. Y. Shoe-blackening	Dec. 17, 1878	14	904
6,097	Morse, David R., Brooklyn, N. Y. Wire-cloth of all kinds	Oct. 8, 1878	14	526
5,548	Mount Tour Thread Company, Easthampton, Mass. Spool-cottons	Jan. 22, 1878	13	126
5,805	Same	Apr. 2, 1878	13	598
6,359	Mulchahey, William, Middlebury, Vt. Soap	July 10, 1878	14	86
6,867	Muller, Henry, New York, N. Y. Cigars	Dec. 10, 1878	14	862
6,236	Mundell, Charles W., Brooklyn, N. Y. Boots and shoes	June 18, 1878	13	1083
5,970	Mundell & Co., John, Philadelphia, Pa. Boots and shoes	Apr. 30, 1878	13	774
6,302	Murphy, Grant & Co., San Francisco Cal., and New York, N. Y. Blankets	July 2, 1878	14	7
6,588	Musselman & Co., Louisville, Ky. Plug chewing-tobacco	Sept. 17, 1878	14	416
6,345	Muzzy & Co., Pittsburg, Pa. Lamp-chimneys	July 9, 1878	14	48
5,911	Myers, A. & H., Philadelphia, Pa. Whisky	Apr. 23, 1878	13	729
5,812	Myers & Brother, H., Savannah, Ga. Cigars	Apr. 2, 1878	13	598
5,761	Myers & Co., Philadelphia, Pa. Wool detergent and bleaching compound	Mar. 19, 1878	13	501
	Myers, H. (See Myers, A. & H.)			
6,162	Nashua Manufacturing Company, Nashua, N. H. Cotton goods	May 28, 1878	13	970
	National Manufacturing Company. (See Brown, Thomas W., assignor.)			
6,497	National Musical Instrument Manufacturing Company, New York, N. Y. Accordions and other reed, pipe, and flute instruments	Aug. 20, 1878	14	272
6,222	National Needle Company, Springfield, Mass. Needles	June 11, 1878	13	1048
	National Steamed Grain Company. (See Lewis, William H., assignor.)			
6,033	Naumburg, Kraus, Lauer & Co., New York, N. Y. Clothing for men's, youths', and boys' wear	May 7, 1878	13	820
6,400	Naumkeag Steam Cotton Company, Salem, Mass. Cotton piece-goods	July 23, 1878	14	120
5,958	Nelson, Henry, Boston, Mass. Cigars, cigarettes, and smoking and chewing tobacco	Apr. 30, 1878	13	773
6,361	Nesfield, Francis L., Lancaster, Pa. Medicinal preparations	July 10, 1878	14	86
5,679	Neus, Healein & Co., New York, N. Y. Cotton goods	Feb. 20, 1878	13	370
6,514	New American File Company, Lincoln, R. I. Files	Aug. 27, 1878	14	310
6,015	Newins & Griswold, Holbrook and Riverhead, N. Y. Chewing and smoking tobacco	May 7, 1878	13	819
5,678	Newman & Co., I., New Haven, Conn. Corsets	Feb. 26, 1878	13	370
6,093	New York Chemical Works, New York, N. Y. Chemical preparations for washing, cleansing, soap-making, &c.	May 21, 1878	13	917
6,723	New York Consolidated Card Company, New York, N. Y. Playing-cards	Oct. 15, 1878	14	562
5,614	Nichols, George W., Brooklyn, N. Y. Cigars	Feb. 5, 1878	13	232
6,319	Nichols, Reuben E., Philadelphia, Pa. Paints and colors	July 2, 1878	14	8
6,034	Nicholson File Company, Providence, R. I. Files	May 7, 1878	13	820
5,824	Niesing, William, New York, N. Y. Cigars	Apr. 2, 1878	13	598
6,730	Norcross, Mellen & Co., Boston, Mass. Lamp-chimneys	Oct. 15, 1878	14	562
5,515	Norris, J. Olney, Baltimore, Md. Flour	Aug. 27, 1878	14	310
5,532	North & Co., O. B., New Haven, Conn. Carriage and saddlery hardware and trimmings	Sept. 3, 1878	14	348
6,075	Norton, Gerritt, New York, N. Y. Extracts for making table-sauces	May 14, 1878	13	872
5,871	Norton & Wilder, Saint Louis, Mo. Ready-mixed paints	Apr. 10, 1878	13	678
5,682	Nottingham Manufacturing Company, New York, N. Y., and Jersey City, N. J. Railway supplies	Feb. 26, 1878	13	370
5,746	Nürnberg Ultramarine Fabrik (Johannes Zeltner) Nürnberg, Bavaria, Germany. Wash-blue	Mar. 12, 1878	13	458
5,775	Nürnberg Ultramarine Fabrik (Johannes Zeltner) Nürnberg, Bavaria. Wash-blue	Mar. 19, 1878	13	501
6,017	Oakley & Keating, New York, N. Y. Washing-machines	May 7, 1878	13	819
6,333	Obertuffer, Abegg & Co., New York, N. Y. Ribbons	Nov. 26, 1878	14	788
5,814	O'Donnell, Charles F., New York, N. Y. Whisky	Apr. 2, 1878	13	598
6,124	Same	May 21, 1878	13	918
5,927	Oliver & Robinson, Richmond, Va. Smoking-tobacco	Apr. 23, 1878	13	730
5,945	Same	Apr. 23, 1878	13	730
6,150	Same	May 28, 1878	13	970
5,787	Same	May 28, 1878	13	970
5,813	Oliffe, William M., New York, N. Y. Medicinal preparation	Mar. 20, 1878	13	550
5,864	Ordway & Clark, Haverhill, Mass. Boots, shoes, and slippers	Apr. 2, 1878	13	598
6,650	Same	Apr. 10, 1878	13	677
6,000	Orebaugh, James F., and William I. Gardner, Camden, Ohio. Liniments	Oct. 1, 1878	14	488
6,651	Orton, Darius Stone, Northampton, N. Y. Granulated pepsin, a remedy for dyspepsia	May 7, 1878	13	819
6,652	Same	Oct. 1, 1878	14	488
6,653	Same	Oct. 1, 1878	14	488
6,654	Same	Oct. 1, 1878	14	488
6,655	Same	Oct. 1, 1878	14	488
6,656	Same	Oct. 1, 1878	14	488
6,657	Same	Oct. 1, 1878	14	488
6,658	Same	Oct. 1, 1878	14	488
6,659	Same	Oct. 1, 1878	14	488
6,660	Same	Oct. 1, 1878	14	488
6,661	Same	Oct. 1, 1878	14	488
6,662	Same	Oct. 1, 1878	14	488
6,663	Same	Oct. 1, 1878	14	488
6,664	Same	Oct. 1, 1878	14	488
6,665	Same	Oct. 1, 1878	14	488
6,666	Same	Oct. 1, 1878	14	488
6,667	Same	Oct. 1, 1878	14	488
6,668	Same	Oct. 1, 1878	14	488
6,669	Same	Oct. 1, 1878	14	488
6,670	Same	Oct. 1, 1878	14	488
6,671	Same	Oct. 1, 1878	14	488
6,672	Same	Oct. 1, 1878	14	488
6,673	Same	Oct. 1, 1878	14	488
6,674	Same	Oct. 1, 1878	14	488
6,675	Same	Oct. 1, 1878	14	488
6,676	Same	Oct. 1, 1878	14	488
6,677	Same	Oct. 1, 1878	14	488
6,678	Same	Oct. 1, 1878	14	488
6,679	Same	Oct. 1, 1878	14	488
6,680	Same	Oct. 1, 1878	14	488
6,681	Same	Oct. 1, 1878	14	488
6,682	Same	Oct. 1, 1878	14	488
6,683	Same	Oct. 1, 1878	14	488
6,684	Same	Oct. 1, 1878	14	488
6,685	Same	Oct. 1, 1878	14	488
6,686	Same	Oct. 1, 1878	14	488
6,687	Same	Oct. 1, 1878	14	488
6,688	Same	Oct. 1, 1878	14	488
6,689	Same	Oct. 1, 1878	14	488
6,690	Same	Oct. 1, 1878	14	488
6,691	Same	Oct. 1, 1878	14	488
6,692	Same	Oct. 1, 1878	14	488
6,693	Same	Oct. 1, 1878	14	488
6,694	Same	Oct. 1, 1878	14	488
6,695	Same	Oct. 1, 1878	14	488
6,696	Same	Oct. 1, 1878	14	488
6,697	Same	Oct. 1, 1878	14	488
6,698	Same	Oct. 1, 1878	14	488
6,699	Same	Oct. 1, 1878	14	488
6,700	Same	Oct. 1, 1878	14	488
6,701	Same	Oct. 1, 1878	14	488
6,702	Same	Oct. 1, 1878	14	488
6,703	Same	Oct. 1, 1878	14	488
6,704	Same	Oct. 1, 1878	14	488
6,705	Same	Oct. 1, 1878	14	488
6,706	Same	Oct. 1, 1878	14	488
6,707	Same	Oct. 1, 1878	14	488
6,708	Same	Oct. 1, 1878	14	488
6,709	Same	Oct. 1, 1878	14	488
6,710	Same	Oct. 1, 1878	14	488
6,711	Same	Oct. 1, 1878	14	488
6,712	Same	Oct. 1, 1878	14	488
6,713	Same	Oct. 1, 1878	14	488
6,714	Same	Oct. 1, 1878	14	488
6,715	Same	Oct. 1, 1878	14	488
6,716	Same	Oct. 1, 1878	14	488
6,717	Same	Oct. 1, 1878	14	488
6,718	Same	Oct. 1, 1878	14	488
6,719	Same	Oct. 1, 1878	14	488
6,720	Same	Oct. 1, 1878	14	488
6,721	Same	Oct. 1, 1878	14	488
6,722	Same	Oct. 1, 1878	14	488
6,723	Same	Oct. 1, 1878	14	488
6,724	Same	Oct. 1, 1878	14	488
6,725	Same	Oct. 1, 1878	14	488
6,726	Same	Oct. 1, 1878	14	488
6,727	Same	Oct. 1, 1878	14	488
6,728	Same	Oct. 1, 1878	14	488
6,729	Same	Oct. 1, 1878	14	488
6,730	Same	Oct. 1, 1878	14	488
6,731	Same	Oct. 1, 1878	14	488
6,732	Same	Oct. 1, 1878	14	488
6,733	Same	Oct. 1, 1878	14	488
6,734	Same	Oct. 1, 1878	14	488
6,735	Same	Oct. 1, 1878	14	488
6,736	Same	Oct. 1, 1878	14	488
6,737	Same	Oct. 1, 1878	14	488
6,738	Same	Oct. 1, 1878	14	488
6,739	Same	Oct. 1, 1878	14	488
6,740	Same	Oct. 1, 1878	14	488
6,741	Same	Oct. 1, 1878	14	488
6,742	Same	Oct. 1, 1878	14	488
6,743	Same	Oct. 1, 1878	14	488
6,744	Same	Oct. 1, 1878	14	488
6,745	Same	Oct. 1, 1878	14	488
6,746	Same	Oct. 1, 1878	14	488
6,747	Same	Oct. 1, 1878	14	488
6,748	Same	Oct. 1, 1878	14	488
6,749	Same	Oct. 1, 1878	14	488
6,750	Same	Oct. 1, 1878	14	488
6,751	Same	Oct. 1, 1878	14	488
6,752	Same	Oct. 1, 1878	14	488
6,753	Same	Oct. 1, 1878	14	488
6,754	Same	Oct. 1, 1878	14	488
6,755	Same	Oct. 1, 1878	14	488
6,756	Same	Oct. 1, 1878	14	488
6,757	Same	Oct. 1, 1878	14	488
6,758	Same	Oct. 1, 1878	14	488
6,759	Same	Oct. 1, 1878	14	488
6,760	Same	Oct. 1, 1878	14	488
6,761	Same	Oct. 1, 1878	14	488
6,762	Same	Oct. 1, 1878	14	488
6,763	Same	Oct. 1, 1878	14	488
6,764	Same	Oct. 1, 1878	14	488
6,765	Same	Oct. 1, 1878	14	488
6,766	Same	Oct. 1, 1878	14	488
6,767	Same	Oct. 1, 1878	14	488
6,768	Same	Oct. 1, 1878	14	488
6,769	Same	Oct. 1, 1878	14	488
6,770	Same	Oct. 1, 1878	14	488
6,771	Same	Oct. 1, 1878	14	488
6,772	Same	Oct. 1, 1878	14	488
6,773	Same	Oct. 1, 1878	14	488
6,774	Same	Oct. 1, 1878	14	488
6,775	Same	Oct. 1, 1878	14	488
6,776	Same	Oct. 1, 1878	14	488
6,777	Same	Oct. 1, 1878	14	

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No.	Name, residence, and title.	Date.	Official Gazette.	
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5, 930	Palacio, Celestino, New York, N. Y. Cigars	Apr. 23, 1878	13	730
5, 931	Same	Apr. 23, 1878	13	730
6, 634	Palen, Matthew, San Bernardino, Cal. Medicinal preparation	Oct. 1, 1878	14	488
5, 664	Palmer Baking Powder Company, Philadelphia, Pa. Baking-powder	Feb. 19, 1878	13	326
6, 604	Palmer, Solon, Newark, N. J. Toilet-soap	Sept. 24, 1878	14	450
5, 531	Pangborn, John W., Jersey City, N. J. Wash-stands	Jan. 15, 1878	13	11
6, 662	Pape, Ernest D., New York, N. Y. Medicinal preparations	Oct. 1, 1878	14	488
6, 077	Partridge Brothers, Augusta, Me. Medical compounds	May 14, 1878	13	872
5, 816	Patapasco Guano Company, Baltimore, Md. Fertilizers	Apr. 2, 1878	13	598
6, 252	Patterson & Co., R. A., Richmond, Va. Chewing-tobacco	June 18, 1878	13	1084
6, 371	Same	July 16, 1878	14	86
6, 623	Same	Sept. 24, 1878	14	450
6, 738	Pauly, Christian, Jersey City, N. J. Shaving-soap	Oct. 22, 1878	14	602
6, 183	Peabody & Co., Henry W., Boston, Mass. Refined petroleum	June 4, 1878	13	1012
6, 833	Peacock & Co., John B., Philadelphia, Pa. Whisky	Nov. 26, 1878	14	788
0, 825	Pease, Francis M., Lee, Mass. Medicinal preparation	Nov. 26, 1878	14	787
6, 827	Peck, Oaden & Co., Westfield, Mass. Whips	Nov. 26, 1878	14	787
5, 748	Peck, William T., Westfield, N. J. Medicinal preparation	Mar. 12, 1878	13	458
6, 516	Peerless Wringer Company, Cincinnati, Ohio. Clothes-wringers	Aug. 27, 1878	14	310
5, 615	Pegram, Benjamin R., Jr., New York, N. Y. Flour	Feb. 5, 1878	13	232
5, 706	Peloubet, Pelton & Co., New York, N. Y. Cabinet or reed organs	Mar. 5, 1878	13	410
5, 504	Pennsylvania Salt Manufacturing Company, Philadelphia, Pa. Chemicals and acids	Jan. 15, 1878	13	11
6, 261	Perkins, George H., Philadelphia, Pa. Metallic cans	June 18, 1878	13	1084
6, 714	Perraud, D. D., Lyons, France. Medical compound	Oct. 8, 1878	14	526
6, 495	Peterson, Joe, Franklinton, N. C. Medicinal preparation	Aug. 20, 1878	14	272
6, 826	Peters, George T., Jersey City, N. J. Smoked herrings	Nov. 26, 1878	14	787
6, 737	Petersen, Christian G., Brooklyn, N. Y. Cigars	Oct. 22, 1878	14	602
6, 875	Phillips, A. E., Washington, D. C. Print-butter	Dec. 10, 1878	14	862
6, 462	Phillips, Frederick, Philadelphia, Pa. Washing-powder	July 23, 1878	14	120
5, 549	Phillips, John F., Jersey City, N. J. Musical toys	Jan. 22, 1878	13	126
5, 815	Phillips, Whitfield W., Richmond, Va. Smoking and chewing tobacco	Apr. 2, 1878	13	598
6, 401	Phoenix Plumbago Mining Company, Philadelphia, Pa. Stove-polish	July 23, 1878	14	120
6, 415	Same	July 30, 1878	14	160
6, 440	Pierce, Ray V. (See Allan & Co., J. C., assignors.)	Aug. 6, 1878	14	206
5, 929	Pierra, Fidel G., Brooklyn, N. Y. Lard	Apr. 23, 1878	13	730
6, 120	Pine, Adams & Dunham, Troy, N. Y. Standing collars made of linen	Apr. 23, 1878	13	730
6, 019	Pings & Pinner, New York, N. Y. Kid gloves	May 7, 1878	13	819
6, 020	Same	May 7, 1878	13	819
5, 522	Pioneer Tobacco Company, Brooklyn, N. Y. Plug-tobacco	Jan. 15, 1878	13	11
5, 819	Same	Apr. 2, 1878	13	598
6, 485	Pirz, Anthony, Long Island City, N. Y. Chemicals	Aug. 20, 1878	14	272
6, 151	Pitkin & Co., George W., Chicago, Ill. Liquid paints	May 28, 1878	13	970
5, 586	Pitt, James H., Bellaire, Ohio. Baking-powder	Jan. 29, 1878	13	180
6, 370	Planten, John R., Brooklyn, N. Y. Capsules for administering medicines	July 16, 1878	14	86
6, 767	Same	Oct. 29, 1878	14	636
6, 507	Pleasantville Land Company, New York, N. Y. Marble	Apr. 30, 1878	14	272
5, 665	Plumb, James S., Syracuse, N. Y. Antiseptic, deodorizer, and embalmer	Feb. 19, 1878	13	326
5, 959	Plummer & Son, W. E., Buffalo, N. Y. Starch	Apr. 30, 1878	13	773
6, 018	Pogue, E. H., Hillsborough, N. C. Smoking-tobacco	May 7, 1878	13	819
6, 076	Pollock, John, Cleveland, Ohio. Biscuits, crackers, jumbles, snaps, and fancy cakes	May 14, 1878	13	872
6, 813	Pond's Extract Company, New York, N. Y. Medicinal preparations	Nov. 19, 1878	14	750
6, 690	Poor, Daniel E., Boston, Mass. Beverage	Dec. 17, 1878	14	904
6, 338	Popham & Co., William H., New York, N. Y. Lard	July 9, 1878	14	48
6, 262	Popham, William H., New York, N. Y. Hogs' lard	June 18, 1878	13	1084
5, 776	Portner, Robert, Alexandria, Va. Lager-beer	Mar. 19, 1878	13	501
5, 747	Potter & Wrightington, Boston, Mass. Fish of all kinds	Mar. 12, 1878	13	458
5, 902	Powell, Robert S., and John J. Turner, New York, N. Y. Medicine	Apr. 23, 1878	13	729
6, 110	Powell, William S., Baltimore, Md. Drugs and chemicals	May 21, 1878	13	918
5, 928	Pratt & Co., A. W., New York, N. Y. Liquid drier	Apr. 23, 1878	13	730
6, 320	Same	July 2, 1878	14	8
5, 960	Preston, Everett B., Chicago, Ill. Hose-nozzles	Apr. 30, 1878	13	773
6, 705	Prewitt, Spurr & Co., Nashville, Tenn. Well-buckets	Oct. 8, 1878	14	526
5, 616	Proctor & Gamble, Cincinnati, Ohio. Soap	Feb. 5, 1878	13	232
5, 633	Same	Feb. 12, 1878	13	278
6, 291	Same	June 25, 1878	13	1130
6, 852	Same	Nov. 20, 1878	14	788
6, 395	Protective Fire Annihilator Company, New York, N. Y. Fire-extinguishing compound	July 23, 1878	14	120
5, 895	Providence Tool Company, Providence, R. I. Sewing-machines	Apr. 23, 1878	13	729
6, 439	Prusso, John, Oakland, Cal. Coffees and spices	Aug. 6, 1878	14	206
6, 665	Pulsometer Steam Pump Company, New York, N. Y. Steam-pumps	Sept. 24, 1878	14	450
6, 006	Putnam, Hooker & Co., Cincinnati, Ohio. Cotton-batting	Sept. 24, 1878	14	450
5, 982	Putnam Nail Company, Boston, Mass. Horseshoe-nails	Apr. 30, 1878	13	774
5, 865	Quetting, Josef J., New York, N. Y. Essential oils	Apr. 16, 1878	13	677
6, 303	Quinn & Nolan, Albany, N. Y. Ales and lager-beer	July 2, 1878	14	7
6, 467	Rackley, Benjamin F., Dover, N. H. Medicines	Aug. 13, 1878	14	236
6, 686	Racklife, Squires, Little Falls, N. J. Boiler-felt	Oct. 8, 1878	14	525
5, 750	Rafferty & Williams, New York, N. Y. Fertilizers and fertilizing materials	Mar. 12, 1878	13	458
6, 362	Ramsay, Thomas, Cleveland, Ohio. Mixed paints and colors in oil	July 16, 1878	14	86
6, 030	Rasin & Co., R. W. L., Baltimore, Md. Fertilizing composition	Sept. 24, 1878	14	450
6, 676	Rath & Ferris, New York, N. Y., and Boston, Mass. Cigars, cigarettes, and smoking-tobacco	Oct. 8, 1878	14	525
5, 749	Rawson & Sons, J., Cincinnati, Ohio. Salted, pickled, and cured or smoked pork	Mar. 12, 1878	13	458
5, 666	Raymond, Henry V., Brooklyn, N. Y. Soap	Feb. 19, 1878	13	326
5, 817	Read, Cassius H., New York, N. Y. Printed publications	Apr. 2, 1878	13	598
6, 539	Redding & Co., Boston, Mass. Salvo	Sept. 3, 1878	14	343
5, 765	Red Wing Mills, Red Wing, Minn. Flour	Mar. 19, 1878	13	501
6, 441	Same	Aug. 6, 1878	14	206
6, 442	Same	Aug. 6, 1878	14	206
5, 843	Reed, George W. M., New Haven, Conn. Tonic	Apr. 9, 1878	13	638
6, 891	Reid, Murdoch & Fischer, Chicago, Ill. Fine-cut chewing-tobacco	Dec. 17, 1878	14	904
6, 892	Same	Dec. 17, 1878	14	904
5, 825	Reinecke, Frederick, Allegheny, Pa. Medical compound	Apr. 2, 1878	13	598
6, 103	Relief Manufacturing Company, New York, N. Y. Medicinal preparation	May 21, 1878	13	917
5, 587	Renault, François & Co., New York, N. Y. Moët and Chandon champagne wine	Jan. 29, 1878	13	180
6, 468	Same	Aug. 13, 1878	14	236
6, 339	Reversible Collar Company, Boston, Mass. Collars, cuffs, and bosoms	July 9, 1878	14	48



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5, 520	Reynolds, James E., East Orange, N. J. Carpet-warp	Jan. 15, 1878	13	11
5, 500	Same same	Apr. 2, 1878	13	598
5, 563	Reynolds & Reynolds, Dayton, Ohio. Inks	Jan. 22, 1878	13	126
5, 932	Rhodes & Lewis, San José, Cal. Cough-mixture	Apr. 23, 1878	13	723
5, 833	Richard & Wood, Woodberry, Md. Yeast	Apr. 9, 1878	13	638
5, 981	Richardson, Christopher, Newark, N. J. Saws and saw attachments	Apr. 30, 1878	13	774
5, 687	Richardson, Joseph C., Saint Louis, Mo. Medicinal preparation	Feb. 26, 1878	13	370
5, 788	Richmond, Samuel A., Saint Joseph, Mo. Medicinal preparation	Mar. 26, 1878	13	550
	Riker, D. S. (See Riker, J. L. & D. S.)			
6, 038	Riker, J. L. & D. S., New York, N. Y. Soda-ash, caustic soda, bleaching-powder, &c.	May 7, 1878	13	820
5, 519	Riquelme, Manuel, New Orleans, La. Smoking-tobacco	Jan. 15, 1878	13	11
5, 564	Same Cigars	Jan. 22, 1878	13	126
5, 477	Robb, M. K., Brooklyn, N. Y. Molasses candy	Jan. 1, 1878	13	8
6, 047	Roberts, Robert J., West Brighton, N. Y. Needles	May 14, 1878	13	871
6, 048	Same same	May 14, 1878	13	871
5, 565	Roberts, Throp & Co., Three Rivers, Mich. Thrashing-machines	Jan. 22, 1878	13	126
6, 631	Robinson, Robert, Brooklyn, N. Y. Soda-water and temperance beer	Sept. 24, 1878	14	450
6, 669	Rockwell & Co., William, Jacksonville, Ill. Pile-drops	Oct. 8, 1878	14	526
5, 933	Rodgers Alleton Company, San Francisco, Cal. Chemical solution for preserving dead bodies	Apr. 23, 1878	13	730
6, 816	Rodgers & Sons, Joseph (limited), Sheffield, England. Cutlery	Nov. 19, 1878	14	750
5, 758	Rohlfing & Rabenstein, Cincinnati, Ohio. Cigars	Mar. 19, 1878	13	501
5, 886	Rose, Daniel E., Brooklyn, N. Y. Cigars	Apr. 16, 1878	13	678
6, 372	Rosebrock, Ernst A., Louisville, Ky. Bread	July 16, 1878	14	86
6, 809	Rosenbaum, Solomon, New York, N. Y. Cigars, cigarettes, and smoking and chewing tobacco	Nov. 19, 1878	14	750
5, 707	Rosenheim, Henry, Baltimore, Md. Whiskies	Mar. 5, 1878	13	410
6, 416	Ross & Co., Charles H., Baltimore, Md. Whisky	July 30, 1878	14	160
6, 417	Same same	July 30, 1878	14	160
6, 418	Same same	July 30, 1878	14	160
6, 419	Same same	July 30, 1878	14	160
6, 420	Same same	July 30, 1878	14	160
6, 523	Roskam, Gerstley & Co., Philadelphia, Pa. Liquors	Aug. 27, 1878	14	310
6, 749	Roulhac & Co., Durham, N. C. Smoking-tobacco	Oct. 22, 1878	14	602
6, 184	Same same	June 4, 1878	13	1012
5, 989	Roundy, Peckham & Co., Milwaukee, Wis. Smoking-tobacco	Apr. 30, 1878	13	774
6, 166	Rowell, Charles, San Francisco, Cal. Medical compound	June 4, 1878	13	1012
5, 887	Rowland & Newbrandt, Philadelphia, Pa. Smoking and chewing tobacco	Apr. 16, 1878	13	678
6, 403	Roxbury Carpet Company, Boston, Mass. Carpets	July 23, 1878	14	120
6, 341	Rubberoid Company, Bristol and Philadelphia, Pa. Gum resembling India-rubber	July 9, 1878	14	48
6, 427	Same Water-proof cloth	July 30, 1878	14	160
5, 866	Russell & Erwin Manufacturing Company, New Britain, Conn. Builders' hardware	Apr. 16, 1878	13	677
6, 202	Russell, Thomas, New York, N. Y. Spool-cotton	June 11, 1878	13	1048
6, 201	Russell, William T., La Fayette, Ga. Medicinal preparation	June 11, 1878	13	1047
5, 664	Ryan & Cumiskey, Saint Louis, Mo. Plug-tobacco	Feb. 26, 1878	13	370
6, 321	Ryerson, Joseph T., Chicago, Ill. Locomotive-engine-boiler tubes	July 2, 1878	14	8
6, 336	Same Boiler-iron	July 9, 1878	14	48
6, 404	Ryerson, Joseph T., Chicago, Ill. assignor to Charles L. Bailey & Co., Harrisburg, Pa. Boiler-iron	July 23, 1878	14	120
5, 711	Salomon, Simon, New York, N. Y. Cigars	Mar. 5, 1878	13	410
5, 723	Same same	Mar. 12, 1878	13	457
6, 239	Sanborn, George H., Brooklyn, N. Y. Paper-cutting machines	June 18, 1878	13	1083
6, 379	Sanchez & Haya, New York, N. Y. Cigars	July 16, 1878	14	86
6, 731	Sanger, William H., Manamont, N. Y. Liquid cements	Oct. 15, 1878	14	562
6, 373	Sass & Hafner, Chicago, Ill. Soda-water, seltzer-water, and ginger-pop	July 16, 1878	14	86
5, 789	Sattler & Co., Baltimore, Md. Whisky	Mar. 26, 1878	13	550
6, 687	Saunders, James Touzeau, London, England. Perfumery and other toilet preparations	Oct. 8, 1878	14	525
6, 480	Saunders, Joseph, Brooklyn, N. Y. Medicine for horses, cattle, &c.	Aug. 13, 1878	14	236
6, 049	Sawyer, Henry, Chelsea, Mass. Washing-blue	May 14, 1878	13	871
6, 678	Same same	Oct. 8, 1878	14	525
6, 349	Schiefelin & Co., New York, N. Y. Cod-liver oil	July 9, 1878	14	48
6, 594	Schiele & Co., Lewis, New York, N. Y. Corsets and bustles	Sept. 17, 1878	14	416
5, 708	Schindler, S. S., and Charles H. S. Davis, Meriden, Conn., and New York, N. Y. Baking-powder	Mar. 5, 1878	13	410
6, 456	Schloss & Frech, Baltimore, Md. Salve	Aug. 13, 1878	14	236
5, 791	Schmitt, Joseph, New York, N. Y. Cigars	Mar. 26, 1878	13	550
5, 961	Schneider, Philipp, New York, N. Y. Cigar-boxes	Apr. 30, 1878	13	773
5, 962	Same same	Apr. 30, 1878	13	773
6, 862	Schramm & Schnabel, San José, Cal. Beer, ale, and porter	Dec. 3, 1878	14	824
6, 655	Schuewind, Joseph, La Porte, Ind. Cigars	Oct. 1, 1878	14	488
5, 913	Schunemann, Theodore, Detroit, Mich. Cigars	Apr. 23, 1878	13	729
6, 322	Same same	July 2, 1878	14	8
	Schuyler, Hartley & Graham. (See Lect, Charles D., assignor.)			
5, 904	Scott & Brother, T. Seymour, Philadelphia, Pa. Paper carpets and paper oil-cloths	Apr. 23, 1878	13	729
5, 935	Scott, Charles W., Hartford, Conn. Medicinal preparation	Apr. 23, 1878	13	730
6, 050	Scott, Quincy A., Pittsburg, Pa. Preparations for filing teeth	May 14, 1878	13	871
6, 994	Sears & Co., Henry, Chicago, Ill. Razors	Dec. 17, 1878	14	904
5, 794	Seeley, Isaac B., Philadelphia, Pa. Trusses for the treatment of hernia, &c.	Mar. 26, 1878	13	550
5, 795	Same Instruments for the treatment of hernia, &c.	Mar. 26, 1878	13	550
5, 796	Same Elastic surgical bandages	Mar. 26, 1878	13	550
6, 171	Seeley, Nathan, New York, N. Y. Material used as paint on the bottom of vessels	June 4, 1878	13	1012
5, 991	Seidenberg & Co., Key West, Fla., and New York, N. Y. Cigars	Apr. 30, 1878	13	774
6, 135	Same Cigarettes	May 28, 1878	13	970
6, 185	Same Leaf-tobacco	June 4, 1878	13	1012
6, 186	Same Cigars and cigarettes	June 4, 1878	13	1012
5, 790	Seldner & Sons, Lewis, Baltimore, Md. Artificial fertilizers	Mar. 26, 1878	13	550
5, 827	Sellers & Co., R. E., Pittsburg, Pa. Medicinal compound	Apr. 2, 1878	13	598
6, 383	Same Medicinal preparation	July 16, 1878	14	86
5, 670	Senour, Simrall & Noonan, Covington, Ky. Plug chewing tobacco	Feb. 19, 1878	13	326
6, 750	Seubert & Warner, Syracuse, N. Y. Cigars	Oct. 22, 1878	14	602
6, 860	Seymour, A. J., Peconic, Ill. Medical preparation	Dec. 3, 1878	14	824
6, 481	Seymour, Sabin & Co., Stillwater, Minn. Thrashing-machines	Aug. 13, 1878	14	236
6, 203	Sharpless, L. C., Philadelphia, Pa. Food for infants and invalids	June 11, 1878	13	1048
5, 710	Shaw Plow Company, H. C., Stockton, Cal. Plows	Mar. 5, 1878	13	410
6, 743	Shelley & Roberts, Detroit, Mich. Medicated lozenges	Oct. 22, 1878	14	602
6, 595	Sherman Brothers & Co., Chicago, Ill. Mustard	Sept. 17, 1878	14	416
6, 596	Same Spices	Sept. 17, 1878	14	416
6, 597	Same Baking-powder	Sept. 17, 1878	14	416
6, 598	Same same	Sept. 17, 1878	14	416

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6,720	Sherman, Henry B., Chicago, Ill. Mustard and spices.....	Oct. 15, 1878	14	562
6,721	Same..... same.....	Oct. 15, 1878	14	562
6,700	Shipman, Lusia E., Providence, R. I. Salvo.....	Oct. 8, 1878	14	526
6,624	Shotwell, Byron A., New York, N. Y. Cigars, cigarettes, and chewing and smoking tobacco.....	Sept. 24, 1878	14	450
6,632	Same..... Cigars, cigarettes, and smoking and chewing tobacco.....	Sept. 24, 1878	14	450
6,633	Same..... same.....	Sept. 24, 1878	14	450
6,601	Same..... Cigars.....	Nov. 12, 1878	14	716
6,828	Sides, Samuel, Saint Louis, Mo. Cakes.....	Nov. 26, 1878	14	787
6,522	Siegel Brothers & Co., New York, N. Y. Ladies and children's wearing apparel.....	Aug. 27, 1878	14	310
6,570	Silbermann & Co., Jacob, New York, N. Y. Ribbons, trimmings, &c.....	Sept. 10, 1878	14	380
6,533	Simmons & Staiger, Leavenworth, Kans. Smoking and chewing tobacco, cigars, and cigarettes.....	Sept. 3, 1878	14	343
6,868	Simonds, G. (See Simonds, H. & G.).....	Dec. 10, 1878	14	862
6,265	Simonds, H. & G., Reading, England. Ale.....	May 21, 1878	13	918
6,126	Simpson, Alice C., Danville, Cal. Remedies for coughs, colds, &c.....	May 21, 1878	13	918
6,279	Simpson, William, Springfield, Mass. Cigars.....	June 25, 1878	13	1130
6,849	Same..... same.....	Nov. 26, 1878	14	788
5,934	Same..... same.....	Apr. 23, 1878	13	730
6,268	Slade, D. & L., Chelsea and Boston, Mass. Bread-raising preparations.....	June 18, 1878	13	1064
6,269	Slade, L. (See Slade, D. & L.).....	June 18, 1878	13	1064
6,270	Slauson & Co., A., New York, N. Y. Confectionery.....	June 18, 1878	13	1064
6,270	Same..... same.....	Nov. 12, 1878	14	716
6,787	Slaven, H. B., San Francisco, Cal. Perfumery.....	July 9, 1878	14	48
6,351	Sleeper, George F., Lynn, Mass. Fried potatoes.....	Apr. 23, 1878	13	729
5,896	Slote, Woodman & Co., New York, N. Y. Scrap-books.....	Apr. 9, 1878	13	638
5,844	Smith, Charles T., New York, N. Y. Spool-cotton.....	Apr. 23, 1878	13	729
5,903	Smith, Chester L., Plymouth, Pa. Shirts.....	Oct. 1, 1878	14	488
6,656	Smith, Churchill & Scribner, New York, N. Y. Cotton goods.....	May 7, 1878	13	830
6,035	Smith, Denison, Philadelphia, Pa. Medicinal preparation.....	Apr. 23, 1878	13	729
5,897	Smith, Dixon & Co., Baltimore, Md. Paper bags.....	July 23, 1878	14	120
6,392	Same..... same.....	Feb. 19, 1878	13	326
5,669	Smith & Dove Manufacturing Company, Andover, Mass. Flax threads, twines, and yarns.....	May 28, 1878	13	970
6,145	Smith, Edward A., Brooklyn, N. Y. Cigars, cigarettes, and smoking-tobacco.....	June 11, 1878	13	1048
6,210	Smith, Edward S., New York, N. Y. Veterinary medicines.....	Apr. 9, 1878	13	638
5,835	Smith & Egge Manufacturing Company, Bridgeport, Conn. Locks and keys.....	Apr. 16, 1878	13	678
5,890	Same..... Chains.....	Oct. 22, 1878	14	602
6,739	Same..... Alloy of metal.....	Mar. 19, 1878	13	501
5,777	Smith, Freeborn G., New York, N. Y. Piano-fortes and organs.....	Feb. 19, 1878	13	326
5,968	Smith, Hanway & Co., Baltimore, Md. Baking-powder.....	Apr. 9, 1878	13	638
5,834	Same..... same.....	Jan. 8, 1878	13	48
5,496	Smith, J. Walter, New York, N. Y. Medical compound.....	Jan. 22, 1878	13	126
5,567	Smith, Matthias M., New York, N. Y. Cigars.....	Jan. 22, 1878	13	126
5,568	Same..... same.....	Apr. 2, 1878	13	196
5,826	Smith Refrigerator and Manufacturing Company, Michigan City, Ind. Refrigerators.....	Mar. 12, 1878	13	438
5,751	Smith, Robert McF., Ludlow, Ky. Plug-tobacco.....	June 11, 1878	13	1048
6,211	Smith, Shadrach T., Kasson, Minn., assignor to Samuel H. and Edward Y. Moore, Chicago, Ill. Stove-polish.....	Mar. 19, 1878	13	501
5,767	Smurr, T. A., Ottawa, Ill. Medicinal compound.....	July 2, 1878	14	8
6,283	Soennecken, Frederick, Bonn, Rhenish Prussia, Germany. Metallic pens.....	June 25, 1878	13	1170
6,290	Soler & Guardias, New York, N. Y. Ointment.....	Apr. 23, 1878	13	729
5,946	Solvay & Co., Bouffoulx, Belgium, and Varsangeville, Dombasle, France. Certain chemical products.....	Mar. 26, 1878	13	530
5,797	Spaulding & Brother, A. G., Chicago, Ill. Base-ball supplies.....	Nov. 5, 1878	14	680
6,776	Spaulding & Merriek, Chicago, Ill. Smoking and chewing tobacco.....	May 14, 1878	13	872
6,078	Spaulding, Norris H., Boston, Mass. Pens.....	July 30, 1878	14	160
6,421	Spelman Brothers, New York, N. Y. Braid.....	Apr. 30, 1878	13	773
5,963	Sperry, Wade & Co., Davidson County, Tenn. Whisky.....	Mar. 19, 1878	13	501
5,706	Spielmann, Wolff & Co., New York, N. Y. Braid.....	Sept. 10, 1878	14	340
6,502	Spinoza, Benjamin, Boston, Mass. Cigars.....	Oct. 22, 1878	14	602
6,744	Stafford, William H., Woonsocket, R. I. Braid and tape.....	Oct. 29, 1878	14	636
6,763	Same..... same.....	Oct. 29, 1878	14	636
6,766	Same..... same.....	Oct. 29, 1878	14	636
6,380	Stagg, George T. (See Taylor, Edmund H., jr., assignor.).....	July 16, 1878	14	86
6,663	Stahlschmidt, Henry, Evansville, Ind. Cigars.....	Oct. 1, 1878	14	498
6,352	St. Amant & Son, D., New York, N. Y. Concentrated alimentary preparations.....	July 9, 1878	14	48
6,304	Standard Machinery Company, Mystic River, Conn. Paper-cutting machines.....	July 23, 1878	14	120
6,616	Same..... same.....	Sept. 24, 1878	14	450
6,281	Standard Oil Company, Pittsburg, Pa. Illuminating and lubricating oils.....	June 25, 1878	13	1130
6,778	Star Clay Company (limited), Philadelphia, Pa. Clay.....	Nov. 5, 1878	14	680
5,905	Stark & Co., E. H., Worcester, Mass. Boots and shoes.....	Apr. 23, 1878	13	729
6,893	Stark & Loewenthal, New York, N. Y. Shirts.....	Dec. 17, 1878	14	904
5,683	State of Kentucky Tobacco Manufacturing Company, Louisville, Ky. Chewing-tobacco.....	Feb. 26, 1878	13	370
5,667	Steiman Jewelry Company, Cincinnati, Ohio. Jewelry.....	Feb. 19, 1878	13	326
6,340	Steinway & Sons, New York, N. Y. Piano-fortes and parts thereof.....	July 9, 1878	14	48
5,566	Steketee, George G., Grand Rapids, Mich. Anti-bilious root and plant pills.....	Jan. 22, 1878	13	126
6,021	Stern, Emil, New York, N. Y. Whisky.....	May 7, 1878	13	830
5,426	Stevens, Austin, Brooklyn, N. Y. Lubricating-oils.....	July 30, 1878	14	160
5,906	Stevens, George I., Brooklyn, N. Y. Prepared calcimine.....	Apr. 23, 1878	13	729
5,589	Stewart, Henry C., Jacksonville, Ill. Proprietary medicines.....	Sept. 17, 1878	14	416
5,966	Stiner, Joseph, New York, N. Y. Baking-powder.....	Apr. 30, 1878	13	773
6,324	Stivers, R. M., New York, N. Y. Wagons, carriages, and sleighs.....	Aug. 27, 1878	14	310
5,487	Saint Louis Beef Canning Company, Saint Louis, Mo. Packed and hermetically-sealed meats.....	Jan. 8, 1878	13	48
5,550	Same..... Canned meats.....	Jan. 22, 1878	13	126
6,889	Stone, Lawson B., Boston, Mass. Mineral and metallic paints.....	Apr. 16, 1878	13	677
5,709	Strait, Marcus D., Saint Louis, Mo. Butter compound.....	Mar. 5, 1878	13	410
5,475	Straiton & Storm, New York, N. Y. Cigars, cigarettes, and smoking-tobacco.....	Jan. 1, 1878	13	8
5,680	Same..... Cigars.....	Feb. 26, 1878	13	370
5,867	Same..... Cigars, cigarettes, and smoking-tobacco.....	Apr. 16, 1878	13	677
6,144	Same..... same.....	May 28, 1878	13	950
6,706	Same..... Cigars and cigarettes.....	Oct. 8, 1878	14	536
6,288	Strauss & Co., Levi, San Francisco, Cal. Blankets.....	June 25, 1878	13	1130
6,289	Same..... same.....	June 25, 1878	13	1130
6,679	Sturdy Brothers & Co., Attleborough, Mass., and New York, N. Y. Jewelry.....	Oct. 8, 1878	14	536
5,818	Swain & Co., C. D., Boston, Mass. Mineral waters.....	Apr. 2, 1878	13	588
6,152	Swartz & Co., C., South Norwalk, Conn. Cigars, cigarettes, and smoking and chewing tobacco.....	May 28, 1878	13	970

## List of trade-marks registered during the year 1878—Continued.

No.	Name, residence, and title.	Date.	Official Gazette.	
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6,242	Sweetser & Son, F., New York, N. Y. Cotton goods	June 18, 1878	13	1033
6,304	Swezey, Isaac R., Huntington, N. Y. Cigars, cigarettes, and smoking and chewing tobacco	July 2, 1878	14	8
5,888	Swift, C. T., Atlanta, Ga. Medical compound	Apr. 16, 1878	13	678
5,807	Sullivan & Burk, Detroit, Mich. Cigars	Apr. 2, 1878	13	598
5,900	Suich, Girolamo, San Francisco, Cal. Smoking-tobacco	Apr. 30, 1878	13	774
5,634	Sussfeld, Lorsch & Co., New York, N. Y. Watch-springs	Feb. 12, 1878	13	278
5,722	Sutton, John R., New York, N. Y. Cigars, cigarettes, and chewing and smoking tobacco	Mar. 12, 1878	13	457
6,677	Sutton, John R., Brooklyn, N. Y. Cigars, cigarettes, and chewing and smoking tobacco	Oct. 8, 1878	14	525
5,752	Taggart & Son, John H., Philadelphia, Pa. Newspapers	Mar. 12, 1878	13	458
6,365	Tansill & Co., R. W., Chicago, Ill. Cigars	July 16, 1878	14	86
6,722	Tarrant & Co., New York, N. Y. Malt extract	Oct. 15, 1878	14	562
5,810	Taylor, Benjamin C., Dayton, Ohio. Horse hay-rakes	Apr. 2, 1878	13	596
6,715	Taylor, Edmund H., jr., Frankfort Ky., assignor to George T. Stagg, Saint Louis, Mo. Whisky	Oct. 8, 1878	14	526
6,055	Taylor, J. Saxon, San Francisco, Cal. Cream-tartar	May 14, 1878	13	871
6,280	Taylor Manufacturing Company, Saint Louis, Mo. Yeast-powders	June 25, 1878	13	1130
6,577	Teichman, Isaac, New York, N. Y. Cigars	Sept. 17, 1878	14	416
6,271	Teller, Matthew S., Sandy Hill, N. Y. Condition-powders	June 18, 1878	13	1084
6,393	Thiele, Emil, Stapleton, N. Y. Clay for crucibles	July 23, 1878	14	120
6,324	Thomas, John W., New Orleans, La. Toilet-soap	July 2, 1878	14	8
6,850	Thomas, W. C., Richmond, Va. Smoking and chewing tobacco	Nov. 26, 1878	14	788
5,478	Thompson, Edward A. (See Wakeman and Thompson.)			
6,105	Thompson & Dale, Boston, Mass. Medicine for the cure of catarrh	Jan. 1, 1878	13	8
5,872	Thornton & Co., John, New York, N. Y. Needles	May 21, 1878	13	918
5,907	Thurber & Co., H. K. & F. B., New York, N. Y. Salt	Apr. 16, 1878	13	678
6,607	Same. Italian paste	Apr. 23, 1878	13	720
6,223	Same. Salt	Sept. 24, 1878	14	450
6,451	Thurber, Theodore, Auburn, N. Y. Anti-friction metals	June 11, 1878	13	1048
6,534	Tiffin Union Churn Company, Tiffin, Ohio. Churns	Aug. 6, 1878	14	206
6,298	Tilden, Henry A., New Lebanon, N. Y. Pills or troches	Sept. 3, 1878	14	348
6,788	Tilt & Son, B. B., Paterson, N. J. Silk handkerchiefs, scarfs, book-marks, badges, and dress-goods, other than dress-trimmings	June 25, 1878	13	1130
5,551	Tower, Abner J., Boston, Mass. Oiled clothing	Nov. 12, 1878	14	716
5,992	Townsend, Volckert P. D., New York, N. Y. Liniment	Jan. 22, 1878	13	126
5,588	Townsend, Wilson & Co., Providence, R. I. Medicinal preparation	Apr. 30, 1878	13	774
5,589	Treat, William W., Watertown, Mass. Minced fish	Jan. 29, 1878	13	180
6,254	Same. Article of food	Jan. 29, 1878	13	180
6,751	Tresilian, Thomas, Gloucester, Mass. Hammocks	June 18, 1878	13	1084
5,809	Treukamp, Francis, Milwaukee, Wis. Soap	Oct. 22, 1878	14	602
6,085	Trigg & Co., George P., New York, N. Y., and Gloucester, Mass. Codfish	Apr. 2, 1878	13	598
6,433	Troth Brothers, Philadelphia, Pa. Hams	May 21, 1878	13	917
5,688	Tryber & Sweetland, Chicago, Ill. Sewing-machines	July 30, 1878	14	160
5,617	Tryon, Son & Co., George K., Philadelphia, Pa. Metal for anti-friction purposes	Feb. 26, 1878	13	370
5,637	Tucker, Edwin, Brooklyn, N. Y. Cigars	Feb. 5, 1878	13	232
5,637	Turner, John J. (See Powell & Turner.)			
6,218	Tuthill, Charles E., Greenport, N. Y. Water-proof wearing apparel	Feb. 12, 1878	13	278
6,895	Udell, Schmieding & Co., Saint Louis, Mo. Axle-grease	June 11, 1878	13	1048
6,158	Ulmer, Robert, New York, N. Y. Cigars, cigarettes, and smoking and chewing tobacco	Dec. 17, 1878	14	904
5,598	Underdorfer, Isaac, New York, N. Y. Cigars, cigarettes, and smoking and chewing tobacco	May 28, 1878	13	970
5,641	Underwood & Co., William, Boston, Mass. Canned baked beans	Jan. 29, 1878	13	180
6,212	Union Lubricator Manufacturing Company, Boston, Mass. Machinery grease	Feb. 12, 1878	13	278
6,708	Union Manufacturing Company, Toledo, Ohio. Wash-boards	June 11, 1878	13	1048
5,638	Union Metallic Cartridge Company, Bridgeport, Conn. Cartridges	Oct. 8, 1878	14	526
5,639	Union Steam Mills Company, Saint Louis, Mo. Wheat, corn, and rye flour	Feb. 12, 1878	13	278
5,640	Same. same	Feb. 12, 1878	13	278
5,973	Upmann, Carl, New York, N. Y. Cigars	Apr. 30, 1878	13	774
6,243	Upton & Co., Salem, Mass. Pile-ointment	June 18, 1878	13	1083
6,079	Van Bibber, Andrew, Cincinnati, Ohio. Composition for printers' inking-rollers	May 14, 1878	13	872
6,113	Van Buskirk, Richard, Peckskill, N. Y. Medicinal tonic	May 21, 1878	13	918
6,759	Van Duzer, Selah R., New York, N. Y. Liquid dentifrice	Oct. 29, 1878	14	636
5,993	Same. Cosmetic	Oct. 29, 1878	14	636
5,942	Van Dyke, Thomas E., Philadelphia, Pa. Medicinal preparations	Apr. 30, 1878	13	774
6,688	Van Wagoner & Williams, New York, N. Y. Door-springs	Apr. 23, 1878	13	730
5,619	Vega, Rafael, Brooklyn, N. Y. Cigars	Oct. 8, 1878	14	525
6,219	Veller, Jayne & Co., Green Point and New York, N. Y. Sirups	Feb. 5, 1878	13	232
6,325	Venable & Co., S. W., Petersburg, Va. Chewing-tobacco	June 11, 1878	13	1048
6,080	Verein für Chemische Industrie, Mayence and Frankfort-on-the-Main, Germany. Essence of vinegar	July 2, 1878	14	8
6,612	Verguole, Julien, New Orleans, La. Bitters	May 14, 1878	13	872
6,442	Verliac, Julien, Paris, France. Remedies for rheumatism and gout	Sept. 24, 1878	14	450
5,656	Videto, Theo. H., Hyde Park, Mass. Medicinal preparations	Aug. 6, 1878	14	206
5,971	Vlahov, Romano, Sebenico, Dalmatia, Austria. Medical compound	Feb. 12, 1878	13	278
5,972	Vogeler, Meyer & Co., Baltimore, Md. Solid and fluid medicinal preparations	Apr. 30, 1878	13	774
6,896	Same. Fluid medicinal preparation	Apr. 30, 1878	13	774
6,337	Vogeler, Son & Co., Baltimore, Md. Cologne-atomizers	Dec. 17, 1878	14	904
5,696	Voige & Winter, Cincinnati, Ohio. Cigars	July 9, 1878	14	48
6,103	Vought & Killgore, Dover, N. J. Medicinal preparations	Mar. 5, 1878	13	410
5,753	Wadsworth, Martinez & Longman, Brooklyn and New York, N. Y. Illuminating-oils	May 28, 1878	13	970
6,273	Wakeman, Abram, jr., and Edward A. Thompson, New York, N. Y. Sugars	Mar. 12, 1878	13	458
5,695	Wakeman & Fierze, New York, N. Y. Bees-wax	June 25, 1878	13	1130
6,444	Walker, J. H., Worcester, Mass. Boots and shoes	Mar. 5, 1878	13	410
5,590	Walker, Joseph H., Worcester, Mass. Boots and shoes	Jan. 29, 1878	13	180
6,083	Wallach, Jacob L., Chicago, Ill. Medicinal preparation	Aug. 6, 1878	14	206
5,892	Wallach's Sons, H., New York, N. Y. Shirts	May 14, 1878	13	872
5,936	Walsh, John R., Chicago, Ill. Tea	Apr. 16, 1878	13	678
6,015	Walz, Alphonse, New Orleans, La. Bitters	Apr. 23, 1878	13	730
6,701	Wander, Ernest H., New York, N. Y. Caps for toy pistols, &c	Apr. 23, 1878	13	729
5,792	Wanzer & Co., R. M., Buffalo, N. Y. Sewing-machine needles	Oct. 29, 1878	14	636
5,625	Waring, Belknap & Co., W. C., Yonkers, N. Y. Hats	Mar. 26, 1878	13	550
5,724	Warner & Co., William H., Philadelphia, Pa. Medicines	Feb. 5, 1878	13	232
6,090	Same. Medicinal preparation	Mar. 12, 1878	13	457
6,452	Warnick & Brown, Utica, N. Y. Cigars	May 14, 1878	13	872
5,501	Warren, Alfred D., Worcester, Mass. Spool-cotton	Aug. 6, 1878	14	206
6,375	Warren, Lober & Co., Philadelphia, Pa. Roofing cement and felt	Jan. 8, 1878	13	48
6,382	Warren, William, New York, N. Y. Spool-cotton	July 16, 1878	14	86
	Same. same	July 16, 1878	14	86

*List of trade-marks registered during the year 1878—Continued.*

No.	Name, residence, and title.	Date.	Official Gazette.	
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6,518	Warren, William, New York, N. Y. Spool-cotton	Aug. 27, 1878	14	310
6,657	Waters, Frank S., New York, N. Y. All kinds of starch	Oct. 1, 1878	14	488
6,658	Same..... same	Oct. 1, 1878	14	488
6,374	Weaver, George S., Albany, N. Y. Medicinal preparation	July 16, 1878	14	86
6,509	Weber, Albert, New York, N. Y. Piano-fortes	Sept. 17, 1878	14	416
5,836	Weeks & Potter, Boston, Mass. Essence of petroleum for medicinal purposes	Apr. 9, 1878	13	638
5,994	Same..... Medicinal preparation	Apr. 30, 1878	13	774
5,943	Wei, De Meyer, Frederick W., New York, N. Y. Catarrh remedy	Apr. 23, 1878	13	720
5,869	Weikel & Smith Spice Company, Philadelphia, Pa. Coffee, spices, and mustards	Apr. 16, 1878	13	678
5,891	Same..... Roasted and ground coffee, spices, and mustard	Apr. 16, 1878	13	678
6,052	Same..... Potash	May 14, 1878	13	871
6,220	Same..... Coffee and spices	June 11, 1878	13	1048
6,292	Same..... Saleratus, soda, borax, and concentrated lye	June 25, 1878	13	1139
6,608	Weiler, Francis M., New York, N. Y. Printing-presses	Sept. 24, 1878	14	450
5,914	Welch & Creighton, New York, N. Y. Ostrich-leathers and fancy feathers generally	Apr. 23, 1878	13	729
6,129	Wells, Richardson & Co., Burlington, Vt. Preparation for coloring butter	May 21, 1878	13	918
6,405	Welsh, Henry, New York, N. Y. Smoking and chewing tobacco and cigars	July 23, 1878	14	129
6,406	Same..... same	July 23, 1878	14	129
6,407	Same..... same	July 23, 1878	14	129
6,408	Same..... same	July 23, 1878	14	129
6,409	Same..... same	July 23, 1878	14	129
6,410	Same..... same	July 23, 1878	14	129
6,445	Same..... Cigars	Aug. 6, 1878	14	206
6,446	Same..... Plug or chewing tobacco	Aug. 6, 1878	14	206
6,447	Same..... same	Aug. 6, 1878	14	206
6,448	Same..... same	Aug. 6, 1878	14	206
6,449	Same..... same	Aug. 6, 1878	14	206
5,552	West, Lucius Morris, Rockford, Ill. Leather-dressing	Jan. 22, 1878	13	126
5,939	Western File Company (limited), Beaver Falls, Pa. Files	Apr. 23, 1878	13	730
5,940	Same..... same	Apr. 23, 1878	13	730
5,941	Same..... same	Apr. 23, 1878	13	730
6,866	Western Manufacturing Company, San Francisco, Cal. Preparation for removing stains, &c., from silk, woolen, &c.	Dec. 3, 1878	14	824
6,571	Western White Lead Company, Philadelphia, Pa., and Chicago, Ill. White lead	Sept. 10, 1878	14	389
5,868	Weston, Byron, Dalton, Mass. Writing-paper	Apr. 16, 1878	13	677
6,860	Wexford Company, New York, N. Y. Cologne water	Dec. 10, 1878	14	862
5,726	Weyman, B. Frank, Pittsburg, Pa. Snuff	Mar. 12, 1878	13	437
5,948	Same..... Smoking-tobacco	Apr. 23, 1878	13	730
6,146	Same..... Snuff	May 28, 1878	13	970
6,148	Same..... Plug-tobacco	May 28, 1878	13	970
6,153	Same..... Snuff	May 28, 1878	13	970
6,154	Same..... Cigars	May 28, 1878	13	970
6,625	Same..... same	Sept. 24, 1878	14	450
6,626	Same..... same	Sept. 24, 1878	14	450
6,830	Same..... Smoking and chewing tobacco and cigars	Nov. 26, 1878	14	787
6,831	Same..... same	Nov. 26, 1878	14	788
6,832	Same..... same	Nov. 26, 1878	14	788
6,204	Wheeler & Alling, Newark, N. J. Shirts	June 11, 1878	13	1048
6,777	Wheeler, Madden & Clemson Manufacturing Company, Middletown, N. Y. Saws	Nov. 5, 1878	14	680
5,725	Wheeler, William O., Sharon, Conn. Milk	Mar. 12, 1878	13	457
6,167	Whitbeck & Co., H. D., Auburn, N. Y. Cathartic pills	June 4, 1878	13	1012
6,299	Same..... Healing-balsam	June 25, 1878	13	1139
6,659	White, Channing, San Francisco, Cal. Medicinal preparations	Oct. 1, 1878	14	483
6,752	Same..... Cough-remedies	Oct. 22, 1878	14	602
5,938	White, Miranda C., New York, N. Y. Ague-cures	Apr. 23, 1878	13	730
6,081	Same..... Medicinal preparation for the cure of neuralgia, &c.	May 14, 1878	13	871
6,469	Whiting, John L., Boston, Mass. Brushes	Aug. 13, 1878	14	236
6,470	Same..... same	Aug. 13, 1878	14	236
6,609	Whitlock & Northen, Richmond, Va. Cigars, cigarettes, smoking and chewing tobacco, and snuff	Sept. 24, 1878	14	450
6,600	Whitlock, Philip, Richmond, Va. Cigars, cigarettes, smoking and chewing tobacco, and snuff	Sept. 17, 1878	14	416
5,689	Whitman, Sons & Co., East Baltimore, Md. Wheat-fans	Feb. 26, 1878	13	379
6,106	Whitney, William H., New York, N. Y. Medicinal preparations	May 21, 1878	13	913
6,428	Wilcox, Charles H., Earlville, N. Y. Dried beef	July 30, 1878	14	169
5,780	Wilder, David H., Corry, Pa. Wooden ware	Mar. 19, 1878	13	501
6,051	Willet, Joseph, Boston, Mass. Artificial stone and artificial-stone goods, such as garden-vases, &c.	May 14, 1878	13	871
5,768	Williamatic Linen Company, Hartford, Conn. Spool-cotton	Mar. 19, 1878	13	501
5,769	Same..... same	Mar. 19, 1878	13	501
5,770	Same..... same	Mar. 19, 1878	13	501
6,460	Williams, Charles M., Greenville, Miss. Dry-goods	Aug. 13, 1878	14	236
6,881	Williams & Co., Thomas C., Richmond, Va. Smoking and chewing tobacco	July 16, 1878	14	8
6,703	Same..... Chewing and smoking tobacco	Oct. 8, 1878	14	538
6,600	Williams & Moore, Stockton, Cal. Cough-syrup	Oct. 1, 1878	14	483
6,745	Williamson, Douw D., New York, N. Y. Flavor for porter	Oct. 22, 1878	14	602
5,937	Wilmerding, Biddle & Bisset, New York, N. Y. Toweling	Apr. 23, 1878	13	730
6,897	Wilson & Co., Walter G., Philadelphia, Pa. Biscuits, crackers, &c.	Dec. 17, 1878	14	904
6,123	Wilson & McCallay, Middletown, Ohio. Plug chewing-tobacco	May 21, 1878	13	913
6,701	Winkelmeier & Co., Julius, Saint Louis, Mo. Lager-beer	Oct. 8, 1878	14	538
5,530	Witthaus, Erich L., Baltimore, Md. Smoking-tobacco and cigarettes	Jan. 15, 1878	13	11
5,781	Wolf, William B., Baltimore, Md. Glossing or polishing solution	Mar. 19, 1878	13	501
5,529	Woodard, Henry S., Bloomington, Ill. Liniment	Jan. 15, 1878	13	11
5,964	Woodbury, Weston & Co., Whitefield, N. H. Medical compound	Apr. 30, 1878	13	771
6,130	Woodman, George Bliss, Philadelphia, Pa. Flour	May 21, 1878	13	913
6,022	Woodside, Green & Labaree, Cincinnati, Ohio. Cigars	May 7, 1878	13	839
6,128	Woolley & Sons, Richard, Cincinnati, Ohio. Leather	May 21, 1878	13	913
6,545	Worcester Corset Company, Worcester, Mass. Corsets	Sept. 3, 1878	14	348
6,459	Worrall, Lewis P., New York, N. Y. Fruit-preserving substances	Aug. 13, 1878	14	236
6,870	Wostenholm & Son, George, Sheffield, England. Cutlery	Dec. 10, 1878	14	862
6,082	Wright, Gillies & Brother, New York, N. Y. Coffee, mustard, and spices	May 14, 1878	13	871
6,702	Yarnall Brothers, Saint Louis, Mo. Pickles	Oct. 8, 1878	14	538
6,004	Yates & Co., San Francisco, Cal. Illuminating-oils	Oct. 1, 1878	14	483
6,605	Same..... same	Oct. 1, 1878	14	483
6,812	Same..... Mixed paints	Nov. 19, 1878	14	759
6,353	Young, Ladd & Coffin, New York, N. Y. Perfumery	July 9, 1878	14	43
6,471	Zano & Roach, Boston, Mass. Water-closets	Aug. 13, 1878	14	236

*List of trade-marks registered during the year 1878—Continued.*

No.	Name, residence, and title.	Date.	Official Gazette.	
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5,965	Zellin & Co., J. H., Philadelphia, Pa. Medicinal preparations .....	Apr. 30, 1878	13	773
5,727	Zerban, Andrew, New York, N. Y. Dry-goods .....	Mar. 12, 1878	13	457
6,565	Ziegler, Henry S., Philadelphia, Pa. Cleaning and polishing powders .....	Sept. 10, 1878	14	380
6,084	Same..... Stove-polish .....	May 14, 1878	13	872
6,802	Zimmermann, Henry, Chicago, Ill. Cigars .....	Nov. 12, 1878	14	716



## LIST OF LABELS REGISTERED DURING THE YEAR 1878.

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1,449	Abbotts & Co., C. W., Baltimore, Md. "Angostura Aromatic Bitters" .....	Mar. 19, 1878	13	501
1,511	Abrams, L. H., Philadelphia, Pa. "Chemical Spirit Gas" .....	May 7, 1878	13	829
1,671	Adams, Thomas M., Burlingame, Kans. "The Self Washer" .....	Sept. 3, 1878	14	348
1,423	Allen & Co., E. S., Cleveland, Ohio. "Guarantee" .....	Feb. 26, 1878	13	370
1,670	Allen, J. & S., Walpole, Mass. "Best Quality Hand Laid Linen Fish Lines" .....	Sept. 3, 1878	14	348
	Allen, S. (See Allen, J. & S.) .....			
1,448	Allen, William, Fort Edwards, N. Y. "Allen's Compound Extract of Butternut for the Blood" .....	Mar. 19, 1878	13	501
1,374	American Cigar Company, Westfield, Mass. "El Circulo De Oro Five Cent Cigar" .....	Jan. 22, 1878	13	125
1,508	American Hosiery Company, New Britain, Conn. "International Exhibition Underwear and Hosiery" .....	Apr. 30, 1878	13	774
1,690	American Jewelry Company, Cincinnati, Ohio. "The Wonderful Lefeuere Diamonds" .....	Sept. 17, 1878	14	416
1,582	Angell, Emerson C., New York, N. Y. "Kokoleon, An Exquisite Emollient," &c. ....	June 25, 1878	13	1129
1,583	Same..... "Romaleon, An Exquisite Emollient," &c. ....	June 25, 1878	13	1132
1,688	Anthony & Co., J. B., Troy, N. Y. "Mushroom Powder" .....	Sept. 10, 1878	14	380
1,387	Ashwell & Co., New York, N. Y. "Ashwell's Solid Cooked Corned Beef" .....	Jan. 1, 1878	13	8
1,437	Atwater, William G., New York, N. Y. "Malarial Cure" .....	Apr. 23, 1878	13	730
1,612	Austen, William J., Oswego, N. Y. "Austen's Forest Flower Cologne" .....	Sept. 3, 1878	14	348
1,572	Bairstow, William A., Warren, Pa. "Bairstow's Ivorytype Colors" .....	May 7, 1878	13	820
1,737	Barbour Brothers, New York, N. Y. "Barbour's Standard Best Irish Flax Shoe Thread" .....	Oct. 29, 1878	14	636
1,738	Same..... "Barbour's Irish Flax Best Shoe Thread" .....	Oct. 29, 1878	14	636
1,347	Barto, H. D., Rochester, N. Y. "Dart's Cough Syrup," &c. ....	Jan. 8, 1878	13	48
1,689	Bath, John, Boston, Mass. "Death to Corns, Bunions, and Chilblains" .....	Sept. 10, 1878	14	370
1,558	Beers & Co., Columbus, Ohio. "The Great American Cure and Preventive for Hog Cholera" .....	May 28, 1878	13	970
1,481	Beiermeister & Son, Troy, N. Y. "Yoke Band" .....	Apr. 16, 1878	13	678
1,488	Same..... "Yoke Band Collar" .....	Apr. 23, 1878	13	729
1,439	Bell, William G., Boston, Mass. "William G. Bell & Co., Boston, Mass., U. S. A. Manufacturers and Proprietors of Bell's Celebrated Sausage Spice" .....	Mar. 12, 1878	13	438
1,746	Bemis, Emory, Jr., Boston, Mass. "La Linda" .....	Oct. 29, 1878	14	636
1,450	Bennett, William W., Little Cooley, Pa. "Bennett's Great Rheumatic Compound—The Lame Man's Friend" .....	Mar. 19, 1878	13	501
1,451	Bensel & Co., New York, N. Y. "Stripped Sample Warranted" .....	Mar. 19, 1878	13	501
1,468	Blackford, S., Saint Paul, Minn. "Dr. E. B. Halliday's Blood Purifier" .....	Apr. 9, 1878	13	628
1,601	Boies, Fay & Conkey, Chicago, Ill. "Cavalier" .....	July 2, 1878	14	8
1,602	Same..... "May Blossom" .....	July 2, 1878	14	8
1,603	Same..... "Happy Day" .....	July 2, 1878	14	8
1,604	Same..... "Gleaming Gold" .....	July 2, 1878	14	8
1,605	Same..... "First Mate" .....	July 2, 1878	14	8
1,606	Same..... "Ocean Queen" .....	July 2, 1878	14	8
1,376	Bond, Joseph R., Brooklyn, N. Y. "Rome's Tooth Powder" .....	Jan. 29, 1878	13	182
1,574	Boorum & Pease, New York, N. Y. "4 Ream Artist's Music Paper, No. —" .....	June 18, 1878	13	104
1,807	Bowers, James, Newark, N. Y. "Spoon Busk" .....	Dec. 10, 1878	14	862
1,663	Bradner, Nathaniel R., Philadelphia, Pa. "Pepto-Quinine" .....	Aug. 27, 1878	14	310
1,455	Brainard, Armstrong & Co., New York, N. Y., and Philadelphia, Pa. "Any Lady Using Our Silk Will Be Presented With One Of These By Sending One Of Our Empty Spools to Either Office" .....	Mar. 26, 1878	13	550
	Brenenstahl, William F. (See Hoyer & Brenenstahl.) .....			
1,623	Brown & Co., D. S., New York, N. Y. "David's Prize Soap" .....	July 16, 1878	14	88
1,624	Same..... "D. S. Brown & Co. Juniper Tar and Glycerine Saponified" .....	July 16, 1878	14	88
1,678	Brown, John D., John E. Brown, and William T. Brown, New York, N. Y. "Brown's Macerare Mfg. Co." .....	Sept. 3, 1878	14	348
	Brown, John E. (See Brown, John D., John E., and William T.) .....			
1,816	Brown, William J., Jr., Philadelphia, Pa. "Heyl's Paper Fasteners" .....	Dec. 17, 1878	14	904
	Brown, William T. (See Brown, John D., John E., and William T.) .....			
1,440	Bucklen, Herbert E., Elkhart, Ind. "Bucklen's Arnica Salve" .....	Mar. 12, 1878	13	478
1,782	Burbank, Henry A., Towanda, Pa. "Burbank's Grease Extractor" .....	Nov. 26, 1878	14	78
1,377	Cahill, Richard, Brooklyn, N. Y. "Information for the Trade" .....	Jan. 29, 1878	13	190
1,489	Cairo City Coal Company, Cairo, Ill. "Cairo City Coal Co." .....	Apr. 23, 1878	13	730
1,628	Capwell & Co., E. C., Phenix, R. I. "Capwell's Kidney Regulator" .....	July 23, 1878	14	120
	Case, M. W. (See Ziegler & Case.) .....			
1,768	Casey, John, Buffalo, N. Y. "Dr. Winkler's Great German Discovery" .....	Nov. 5, 1878	14	680
1,513	Caswell, Hazard & Co., New York, N. Y., and Newport, R. I. "Beef Tonie" .....	May 7, 1878	13	820
1,514	Same..... same..... same.....	May 7, 1878	13	820
1,564	Cassebeer, Henry A., New York, N. Y. "Cassebeer's Ammonia Lozenges" .....	June 11, 1878	13	1048
1,625	Caterson, William H., Philadelphia, Pa. "Henry's Liver Pills" .....	July 16, 1878	14	86
1,636	Caterson, William M., Philadelphia, Pa. "Caterson's Constitution Invigorating Syrup" .....	July 30, 1878	14	160
1,680	Chase, Charles D., Saint Louis, Mo. "Godsay's East India Fever Tree Extract" .....	Sept. 10, 1878	14	380
1,456	Chase, Henry S., Saint Louis, Mo. "Stannon's Gold for Permanent Fillings" .....	Mar. 26, 1878	13	550
1,715	Same..... "Plastic Tin" .....	Oct. 15, 1878	14	562
1,708	Childs, Charles S., Arlington, Mass. "Calma's Liniment" .....	Oct. 8, 1878	14	526
1,454	Childs, William H. H., New York, N. Y. "Childs' Prize-Medal Roofing-Felt" .....	Mar. 19, 1878	13	501
1,405	Cladlin & Co., H. B., New York, N. Y. "Extra Dress Styles" .....	Feb. 19, 1878	13	376
1,406	Same..... "These Prints are Guaranteed to be Full Madder," &c. ....	Feb. 19, 1878	13	376
1,642	Clark & Co., Buffalo, N. Y. "Clark's Improved Blind Hinges for Wood" .....	Aug. 6, 1878	14	206
1,679	Same..... "Buffalo Noiseless Blind Hinges" .....	Sept. 3, 1878	14	348
1,792	Clark, John T., Pilot View, Ky. "Rock Oil Salve" .....	Dec. 3, 1878	14	824
1,739	Clough, E. N. O., Leavenworth, Kans. "E. N. O. Clough's Fever and Ague Cure" .....	Oct. 29, 1878	14	696
1,551	Cole, Lewis, Aurora, Ill. "Cole's Business Record" .....	May 28, 1878	13	970
1,362	Colgate & Co., New York, N. Y. "Jabon Economico De Colgate & Co." .....	Jan. 22, 1878	13	125
1,770	Same..... "Colgate & Co.'s New Soap" .....	Nov. 12, 1878	14	716
1,398	Collins Company, Collinsville, Conn. "The Charter Oak Axe" .....	Feb. 5, 1878	13	22
1,550	Same..... "Manufactured from Extra Cast-Steel" .....	May 21, 1878	13	918
1,790	Conrad & Co., C., Mainz-Geisenheim-on-the-Rhine, Germany, and Saint Louis, Mo. "Budweiser Lager Beer" .....	Dec. 3, 1878	14	824
1,386	Continental Bank Note Company, New York, N. Y. "Tint for Bank-Checks and Drafts" .....	Jan. 29, 1878	13	190
1,457	Convery, John R., Baltimore, Md. "Convery, the Sign Painter" .....	Mar. 26, 1878	13	550
1,531	Cooper, Edgar F., East Weymouth, Mass. "Cooper's Great Rheumatic Cure" .....	May 14, 1878	13	472
1,407	Cornwall & Brother, Louisville, Ky. "Oriental Company Family German Soap" .....	Feb. 19, 1878	13	376
1,408	Same..... "Cornwall & Brother's Dixie's Delight" .....	Feb. 19, 1878	13	376

## List of labels registered during the year 1878—Continued.

No.	Name, residence, and title.	Date.	Official Gazette.	
			Vol.	Page.
1,409	Cornwall & Brother, Louisville, Ky. "Cornwall & Brother National Soap".....	Feb. 19, 1878	13	326
1,410	Same..... "Cornwall & Brother Game Soap".....	Feb. 19, 1878	13	326
1,411	Same..... "Albion Vegetable Oil Soap".....	Feb. 19, 1878	13	326
1,412	Same..... "Cornwall & Brother Blueing Soap".....	Feb. 19, 1878	13	326
1,413	Same..... "Blue Bell Cornwall & Brother".....	Feb. 19, 1878	13	326
1,414	Same..... "Cornwall & Brother Kentucky Soap".....	Feb. 19, 1878	13	326
1,500	Crane Brothers, Westfield, Mass. "Warranted All Linen".....	Apr. 23, 1878	13	730
1,501	Same..... "Japanese Mills".....	Apr. 23, 1878	13	730
1,640	Crofut & Co., E. B., Syracuse, N. Y. "Central City Super-Phosphate".....	July 30, 1878	14	160
1,753	Crooks, Atha B., Newark, N. J. "Dr. Bancroft's German Elixir".....	Nov. 26, 1878	14	788
1,751	Same..... "Bancroft's German Balsam".....	Dec. 3, 1878	14	824
1,701	Culver, Tuttle, New York, N. Y. "Hamburger Boneless Ham".....	Feb. 19, 1878	13	326
1,781	Curtice Brothers, Rochester, N. Y. "Best Pickles".....	Nov. 26, 1878	14	788
1,616	Cutter, Wilson, Burlington, N. J. "Cutter's Infallible Rheumatic Remedy," &c.....	July 9, 1878	14	48
1,636	Darby & Williams, New York, N. Y. "Buff's Cough Cure".....	Aug. 20, 1878	14	272
1,643	Davis, Charles H., Haverhill, Mass. "Volney's Cardamom Compound".....	Aug. 6, 1878	14	206
1,712	Davis & Co., D. O., Richmond, Va. "R. A. Stuart's Rockbridge Co.".....	Oct. 8, 1878	14	620
1,338	Detweiler & Co., John S., Philadelphia, Pa. "Pennsylvania Oaten Grits".....	Jan. 1, 1878	13	8
1,339	Do..... "Delaware Wheaten Grits".....	Jan. 1, 1878	13	8
1,340	Deusaner, Philip, jr., Kokomo, Ind. "Cash Sale".....	Jan. 1, 1878	13	8
1,458	Same..... "Deusaner's Ticket System".....	Mar. 26, 1878	13	550
1,584	Same..... "Deusaner's Merchandise Ticket".....	June 25, 1878	13	1130
1,601	Same..... "Deusaner's Merchandise Token".....	Sept. 17, 1878	14	416
1,808	Same..... "same".....	Dec. 10, 1878	14	862
1,609	Devens, James H., Albany, N. Y. "Ladies' Favorite Yeast".....	Oct. 1, 1878	14	488
1,575	De Voy, Margaret, New York, N. Y. "Camellia Lotion for Beautifying and Healing the Skin".....	June 18, 1878	13	1084
1,649	Dillenbeck, Menzo H., Lyons, N. Y. "The Druggist Brand of Pure Refined Oil of Peppermint".....	Aug. 13, 1878	14	236
1,429	Dohme & Co., G. C., Baltimore, Md. "Sulphide of Arsenicum".....	Mar. 5, 1878	13	410
1,462	D'Ossone, C. V., Philadelphia, Pa. "D'Ossone's London Writing and Copying Fluid".....	Apr. 2, 1878	13	598
1,784	Dougherty, Andrew, Brooklyn, N. Y. "Indicators".....	Nov. 26, 1878	14	788
1,700	Dowie & Morse, Charleston, S. C. "Doctor C. A. Simmons' Hepatic Compound or Liver Cure".....	Oct. 1, 1878	14	488
1,450	Dudley & Co., Brooklyn, N. Y. "Dudley's Emulsion of Pure Cod-Liver Oil".....	Mar. 26, 1878	13	550
1,341	Du Prey, Eugene A., Brooklyn, N. Y. "Swiss Kumys Or Lacto Pepticum".....	Jan. 1, 1878	13	8
1,387	Dushane, John A., Baltimore, Md. "Count Your Paper".....	Feb. 5, 1878	13	232
1,388	Same..... "Woodbine Mills".....	Feb. 5, 1878	13	232
1,389	Same..... "Sheets to the Quire".....	Feb. 5, 1878	13	232
1,390	Same..... "Guaranteed Full Count".....	Feb. 5, 1878	13	232
1,510	Dustin, S. B., Utica, N. Y. "Mighill Dustin's Celebrated Ointment or Salve".....	Apr. 30, 1878	13	774
1,342	Dyer, Benjamin W., New York, N. Y. "Compound Witch Hazel Pills".....	Jan. 1, 1878	13	8
1,353	Same..... "Compound Witch Hazel Hair Restorer".....	Jan. 15, 1878	13	11
1,416	Same..... "Witch Hazel Ointment".....	Feb. 19, 1878	13	326
1,502	Same..... "Witch-Hazel (Hamamelis) Bitters".....	Apr. 30, 1878	13	774
1,655	Same..... "Saccharated Chloro-Pepsine".....	Aug. 20, 1878	14	272
1,375	Eason, Robert, New York, N. Y. "Hussey's Special Message and Letter Post".....	Jan. 22, 1878	13	125
1,441	Eastman & Fitch, Concord, N. H. "Dr. Shanyo's German Bitters".....	Mar. 12, 1878	13	458
1,532	Eggleston, Jesse Scott, Auburn, N. Y. "J. S. Eggleston's Non-Corrosive Preparation".....	May 14, 1878	13	872
1,391	Elbert Bro. & Co., Washington, D. C. "The American Corn, Bunion, and Wart Cure".....	Feb. 5, 1878	13	232
1,573	Elgin Ink Company, Elgin, Ill. "Elgin Black Ink".....	June 11, 1878	13	1048
1,780	Elliott, John, Stockton, Cal. "Elliott's Great Discovery".....	Nov. 19, 1878	14	750
1,716	Engelbrecht, Fox & Co., San Francisco, Cal. "The Club House".....	Oct. 15, 1878	14	562
1,767	Estill, J. H., Savannah, Ga. "Florida Orange".....	Nov. 5, 1878	14	680
1,515	Ezekiel, Walter A., Cincinnati, Ohio. "On All Cash Retail Sales of Twenty-Five Cents," &c.....	May 7, 1878	13	820
1,552	Same..... "These Segars are Made by Cubans at Key West, Florida".....	May 28, 1878	13	970
1,430	Fairbanks, F. C. (See Smith & Fairbanks.)			
1,554	Fairbanks, John, Chicago, Ill. "Fairbanks' Sunday-School Collection Box".....	Mar. 5, 1878	13	410
1,554	Farrington, Joseph T., New York, N. Y. "Farrington's Celebrated Glue".....	May 28, 1878	13	970
1,390	Ferree, James C., Springfield, Mass. "Hooker's Stomach Bitters".....	Feb. 12, 1878	13	278
1,553	Fierstad, George H., Circleville, Ohio. "Angelica Bitters or Poor Man's Tonic".....	May 28, 1878	13	970
1,561	Fish, Storer & Davis, Shelby, Ohio. "C. F. Fish Fancy Flour".....	May 28, 1878	13	970
1,709	Fisher, Alfred J., Brooklyn, N. Y. "Cameo Valentines".....	Oct. 8, 1878	14	526
1,673	Fleming & Co., New York, N. Y. "Fragrant Carminative Sweet Aroma for the Breath".....	Sept. 3, 1878	14	348
1,400	Fletcher, Charles M., New York, N. Y. "Coca Bitters the Great South American Tonic".....	Feb. 12, 1878	13	278
1,793	Follett, Joseph W., New York, N. Y. "Imperial Packing Company".....	Dec. 3, 1878	14	824
1,329	Frash & Co., New York, N. Y. "Extra Dry".....	Jan. 1, 1878	13	8
1,756	Freeman & Co., A. A., La Crosse, Wis. "A. A. Freeman & Co., 196 Superlative".....	Nov. 5, 1878	14	680
1,785	Same..... "A. A. Freeman & Co., 196 Dundas".....	Nov. 26, 1878	14	788
1,788	Same..... "A. A. Freeman & Co., 196 Nonpareil".....	Nov. 26, 1878	14	788
1,392	French, A. S., East Hampton, N. Y. "French's Freckle Remover".....	Feb. 5, 1878	13	232
1,431	French, David H., Hudson, Ill. "French's Rubber Cement".....	Mar. 5, 1878	13	410
1,567	French, Richards & Co., Philadelphia, Pa. "French, Richards & Co. Strictly Pure Lead," &c.....	June 11, 1878	13	1048
1,568	Same..... "French's Selected Calced Plaster".....	June 11, 1878	13	1048
	Friend, John. (See Stone & Friend.)			
1,516	Friih, Carl D. S., Philadelphia, Pa. "Kamillen Seife Chamomile Soap".....	May 7, 1878	13	820
1,617	Fuguet & Sons, S., Philadelphia, Pa. "Orlando".....	July 6, 1878	14	48
1,618	Same..... "same".....	July 9, 1878	14	48
1,644	Fuller, Frank, New York, N. Y. "Health Food Company's Gluten Soap".....	Aug. 6, 1878	14	206
1,586	Gaab, George, Cincinnati, Ohio. "Grand Havana-Filler Hand-Made".....	June 25, 1878	13	1130
1,701	Gail & A. G. W., Baltimore, Md. "Superior Scotch Snuff".....	Oct. 1, 1878	14	488
1,637	Gale, D. Tillotson, Albany, N. Y. "Clysterium for the Cure of Leucorrhoea, Inflammation, etc".....	July 30, 1878	14	160
1,638	Same..... "Extract Sweet Clover".....	July 30, 1878	14	160
1,533	George, Robertson F., Galveston, Tex. "Tuxpen Chewing Gum".....	May 14, 1878	13	872
1,425	Gerard, William, Brooklyn, N. Y. "Gerard's Preventive".....	Feb. 26, 1878	13	370
1,555	Gooding, F. M., Millington, Md. "Britton's Ague Pills".....	May 28, 1878	13	970
1,710	Goodwin & Co., New York, N. Y. "Manufactured Expressly for Cigarette and Pipe Smoking".....	Oct. 8, 1878	14	526
1,570	Goodyear Rubber Company, New York, N. Y. "The Goodyear Union Syringe No. 3, etc".....	June 11, 1878	13	1048
1,348	Gorham, J. R., jr., Newburg, N. Y. "Black's Expectorative".....	Jan. 8, 1878	13	48
1,424	Gray, James R., Ayer, Mass. "Solidified Glycerine".....	Feb. 26, 1878	13	370
1,660	Green & Clark, Saint Louis, Mo. "Missouri Cider".....	Aug. 27, 1878	14	310
1,490	Greene, Tweed & Co., New York, N. Y. "Blake's Belt Stud".....	Apr. 23, 1878	13	730
1,707	Gregory, W. L., Buffalo, N. Y. "Syrup of Dover's Powder".....	Oct. 1, 1878	14	480
1,809	Guitard & Co., San Francisco, Cal. "The Self-Measuring and Scale Package".....	Dec. 10, 1878	14	862
1,794	Guitard, Etienne, San Francisco, Cal. "Japan Teas".....	Dec. 3, 1878	14	824
1,705	Same..... "Excellent".....	Dec. 3, 1878	14	824
1,796	Same..... "E. Guitard & Co., 405 & 407 Sansome Street, San Francisco".....	Dec. 3, 1878	14	824
1,634	Hackley & Eldridge, Jancsville, Wis. "Sure Cure for Sick Headache".....	July 23, 1878	14	120

*List of tables registered during the year 1878—Continued.*

No.	Name, residence, and title.	Date.	Official Gazette.	
			Vol.	Page.
1,775	Haines & Co., Edwin J., Haverhill, Mass. "Ginger Aperient"	Nov. 10, 1878	14	750
1,629	Hall, James A., Elmira, N. Y. "Dr. Augustine's Suppositories for Piles"	July 23, 1878	14	120
1,630	Same..... "Dr. Augustine's Laxative Pills"	July 23, 1878	14	120
1,452	Halpruner, Winfield S., San Francisco, Cal. "Dr. Halpruner Healing Salve"	Mar. 19, 1878	13	501
1,363	Hance, Robert A., Philadelphia, Pa. "Robert A. Hance's Elixir Coca Comp"	Jan. 22, 1878	13	125
1,442	Hastings, Lyndon A., Lawrence, Mass. "Herrshaw's Cure"	Mar. 12, 1878	13	468
1,683	Hauschildt, Frederick, New York, N. Y. "The Everlasting"	Sept. 10, 1878	14	180
1,684	Same..... same..... same	Sept. 10, 1878	14	180
1,817	Hayden, P., Newark, N. J. "1876. Davis' Hard Finish"	Dec. 17, 1878	14	904
1,565	Hegeman & Co., New York, N. Y. "Hegeman & Co.'s Celebrated Pastile or Witch Hazel Lozenges"	June 11, 1878	13	1048
1,757	Same..... "Hegeman's Tolu and Liverwort Expectorant"	Nov. 5, 1878	14	680
1,758	Same..... "Hegeman's Formerly Velpeau's Celebrated Remedy for Diarrhœa, Dysentery, Cholera Morbus, &c."	Nov. 5, 1878	14	680
1,545	Heintzelman, Rush B., New York, N. Y. "Catatrea Cigarettes"	May 21, 1878	13	918
1,330	Heppenheimer & Maurer, New York, N. Y. "Mercedes"	Jan. 1, 1878	13	8
1,331	Same..... "Daisy"	Jan. 1, 1878	13	8
1,332	Same..... "The Start"	Jan. 1, 1878	13	8
1,333	Same..... "Seventh Daughter"	Jan. 1, 1878	13	8
1,334	Same..... "Best Havana"	Jan. 1, 1878	13	8
1,335	Same..... "Determino"	Jan. 1, 1878	13	8
1,354	Same..... "Dido"	Jan. 15, 1878	13	11
1,355	Same..... "Good Taste"	Jan. 15, 1878	13	11
1,356	Same..... "Old Abe"	Jan. 15, 1878	13	11
1,357	Same..... "Murray Hill"	Jan. 15, 1878	13	11
1,358	Same..... "Idol"	Jan. 15, 1878	13	11
1,378	Same..... "Penelope"	Jan. 29, 1878	13	130
1,379	Same..... "Ellin"	Jan. 29, 1878	13	130
1,380	Same..... "Special Artist"	Jan. 29, 1878	13	130
1,393	Same..... "Forest Home"	Feb. 5, 1878	13	232
1,464	Same..... "Old Mill"	Apr. 2, 1878	13	586
1,465	Same..... "Pow-Wow"	Apr. 2, 1878	13	586
1,466	Same..... "American Cousin"	Apr. 2, 1878	13	586
1,469	Same..... "Fascination"	Apr. 9, 1878	13	638
1,470	Same..... "Dispatch"	Apr. 9, 1878	13	638
1,482	Same..... "Amateurs"	Apr. 16, 1878	13	678
1,517	Same..... "El Boca"	May 7, 1878	13	820
1,534	Same..... "La Noblesa"	May 14, 1878	13	872
1,571	Same..... "Early Rose"	June 11, 1878	13	1048
1,572	Same..... "Sure Pop"	June 11, 1878	13	1048
1,588	Same..... "Ever Faithful"	June 25, 1878	13	1130
1,610	Same..... "Caballiste"	July 9, 1878	14	48
1,611	Same..... "Rarus"	July 9, 1878	14	48
1,612	Same..... "Mabille"	July 9, 1878	14	48
1,613	Same..... "Helios"	July 9, 1878	14	48
1,694	Same..... "U. S. Mail"	Sept. 24, 1878	14	450
1,702	Same..... "Duett"	Oct. 1, 1878	14	488
1,717	Same..... "Autumn"	Oct. 15, 1878	14	532
1,718	Same..... "Red Cloud"	Oct. 15, 1878	14	532
1,730	Same..... "Right Out"	Oct. 22, 1878	14	602
1,731	Same..... "Little Satan"	Oct. 22, 1878	14	602
1,732	Same..... "The Hit"	Oct. 22, 1878	14	602
1,733	Same..... "U. S. Mail"	Oct. 22, 1878	14	602
1,777	Same..... "Spread Eagle"	Nov. 19, 1878	14	750
1,797	Same..... "Etelka"	Dec. 3, 1878	14	824
1,566	Hesselroth, Lawrence, Chicago, Ill. "Hesselroth's Universal Healing Plaster"	June 11, 1878	14	1048
1,547	Hetherington, John E., Cincinnati, Ohio. "Hetherington's Tropic Fruit Laxative"	May 21, 1878	13	918
1,576	Same..... same..... same	June 18, 1878	13	1054
1,577	Same..... "Tropic Fruit Laxative"	June 18, 1878	13	1054
1,639	Hewson, James, Kansas City, Mo. "French Baking Powder"	July 30, 1878	14	130
1,594	Heyer, Ellis J., and William F. Brenenstuhl, Boston, Mass. "Brenenstuhl's Elastic Waterproof Leather Dressing, etc"	July 2, 1878	14	8
1,799	Hicks, Brown & Co., Mansfield, Ohio. "Brown's Best Family Flour for C. B. & Y."	Dec. 3, 1878	14	824
1,800	Same..... "Coleman's Best St. Louis Flour"	Dec. 3, 1878	14	824
1,463	Higgins & Co., Charles S., Brooklyn, N. Y. "Higgins' German Laundry Soap"	Apr. 2, 1878	13	586
1,518	Hill & Buss, Boston, Mass. "Hill's Creamed Castor-Oil"	May 7, 1878	13	820
1,703	Hiscox & Co., New York, N. Y. "Parker's Ginger Tonic"	Oct. 1, 1878	14	488
1,704	Same..... "Parker's Hair Balsam"	Oct. 1, 1878	14	488
1,587	Hoffman, Madeline, New York, N. Y. "Liebig Coca-Beef Tonic (Peptonized)"	June 25, 1878	13	1130
1,681	Same..... "Coca Beef Tonic with Sherry Wine and Iron"	Sept. 10, 1878	14	330
1,682	Same..... "Coca Beef Tonic"	Sept. 10, 1878	14	330
1,483	Holbrook & Co., Salem, Mass. "Aromatic Extract of Jamaica Ginger"	Apr. 16, 1878	13	678
1,546	Hood & Co., M. C., Boston, Mass. "Hood's French Cologne"	May 21, 1878	13	918
1,741	Horne, F. B., Framingham, Mass. "Starr's Liniment"	Oct. 29, 1878	14	656
1,744	Houchin Manufacturing Company, New York, N. Y. "Fringed Wax Gas Lighters or Tapers"	Oct. 29, 1878	14	656
1,693	Houghton & Co., E. F., Philadelphia, Pa. "Carbolized Cosmoline"	Sept. 24, 1878	14	450
1,776	Same..... "Carbolized Cosmoline (Sub-Ceratum Petrolei Carbolizatum)"	Nov. 19, 1878	14	750
1,810	Same..... "Fluid Cosmoline (Petroleum)"	Dec. 10, 1878	14	822
1,650	Howard, Austin, Milford, Mass. "Howard's Great South American Remedy"	Aug. 13, 1878	14	236
1,443	Howard, Samuel F., and Lyman E. Wardwell, Springfield, Mass. "Sterling Silver Polish"	Mar. 12, 1878	13	458
1,460	Howe, G. V., Otwell, Ind. "G. V. Howe's Cherry Tonic"	Mar. 26, 1878	13	550
1,651	Hummel & Co., George, Milwaukee, Wis. "The Celebrated Champagne Beer"	Aug. 13, 1878	14	236
1,343	Jeffers, Perley, Chicago, Ill. "Jeffers' Original Bronchial Cigarettes, etc"	Jan. 1, 1878	13	8
1,394	Same..... "Jeffers' French Catarrh Cure"	Feb. 5, 1878	13	232
1,417	Jenney, Walter P., Brooklyn, N. Y. "Tunyoap Watertight"	Feb. 19, 1878	13	326
1,692	Jervoy, William E., New York, N. Y. "Flowers of Petroleum"	Sept. 17, 1878	14	416
1,695	Same..... same..... same	Sept. 24, 1878	14	450
1,556	Jones, Anna W., Boston, Mass. "Mrs. Jones' Burn Ointment"	May 28, 1878	13	970
1,674	Judge, James D., Boston, Mass. "Anti-Lean, The Greatest Medical Discovery of the Age"	Sept. 3, 1878	14	348
1,818	Same..... "Pectoral"	Dec. 17, 1878	14	904
1,657	Kearbey, Henry G., Philadelphia, Pa. "Dextro Quinine"	Aug. 20, 1878	14	272
1,544	Kelley, P. H., Indianapolis, Ind. "Kelley's French Eau de Cologne"	May 14, 1878	13	872
1,418	Kellogg, Edward H., New York, N. Y. "Anti-Corrosive Car Box Oil"	Feb. 19, 1878	13	326
1,696	Kendall, Elizabeth, Dunstable, Mass. "Mrs. Kendall's Ointment"	Sept. 24, 1878	14	450
1,705	Kendall, Prudence C., New Orleans, La. "P. C. Kendall's Baking Powder"	Oct. 1, 1878	14	418

## List of labels registered during the year 1878—Continued.

No.	Name, residence, and title.	Date.	Official Gazette.	
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1,503	Kerbs & Spiess, New York, N. Y. "Grand Victory" .....	Apr. 30, 1878	13	774
1,607	Same..... "The Crack New Yorker" .....	July 2, 1878	14	8
1,658	Same..... "Above All" .....	Aug. 20, 1878	14	272
1,711	Same..... "Red and Black" .....	Oct. 8, 1878	14	526
1,491	Kimball, D. B., Syracuse, N. Y. "Kimball's Metallic Roofing Paint" .....	Apr. 23, 1878	13	730
1,426	King, Jabe O., New York, N. Y. "Manhattan Mills" .....	Feb. 26, 1878	13	370
1,427	Same..... "Lawrence Thread" .....	Feb. 26, 1878	13	370
1,619	Kingsford, Thomson, Oswego, N. Y. "Kingsford's Oswego Pine Starch" .....	July 9, 1878	14	48
1,620	Same..... "Kingsford's Oswego Silver Gloss Starch" .....	July 9, 1878	14	48
1,484	Kittredge & Co., William C., Whitehall, N. Y. "The Deodorizing Garbage and Ash Box" .....	Apr. 16, 1878	13	678
1,619	Krauser & Bro., E., Milton, Pa. "Krauser's Florida Cough Syrup" .....	Dec. 17, 1878	14	904
1,652	Lansing, John A., Brookline, Mass. "Jaques' Triple Extract" .....	Aug. 13, 1878	14	236
1,774	Leavitt, M. B., Boston, Mass. "Label for Circulars, &c." .....	Nov. 19, 1878	14	750
1,349	Lee, Eugene C., Boston, Mass. "Genuine Persian Tooth Paste" .....	Jan. 8, 1878	13	48
1,548	Lee, John P., Chicago, Ill. "Dr. Macalister's Cough Mixture" .....	May 21, 1878	13	918
1,401	Levy Brothers, New York, N. Y. "Legion of Honor" .....	Feb. 12, 1878	13	278
1,607	Same..... "Black Diamonds" .....	Aug. 27, 1878	14	310
1,559	Levy & Co., Ben., Boston, Mass. "Beauté au Teint Levy's French Cream" .....	May 28, 1878	13	970
1,359	Lewis, Pearl C., Windham, N. Y. "Lewis Improved Potato Bug Exterminator" .....	Jan. 15, 1878	13	11
1,675	Lichtensten & Bro., New York, N. Y. "American Sports" .....	Sept. 3, 1878	14	348
1,719	Liddell & Co., Charles, Cincinnati, Ohio. "Chas. Liddell & Co.'s Turkish Bath Soap" .....	Oct. 15, 1878	14	562
1,444	Lies & Co., George P., New York, N. Y. "The American Popular Five Cent Segar" .....	Mar. 12, 1878	13	458
1,381	Littell & Shaw, New York, N. Y. "Prof. Shaw's Fragrant Antiseptic Cologne," &c. ....	Jan. 29, 1878	13	180
1,535	Loag, Samuel, Philadelphia, Pa. "Silver White Lead" .....	May 14, 1878	13	872
1,428	Long Island Brewery, Brooklyn, N. Y. "Family Ale" .....	Feb. 26, 1878	13	370
1,560	Lowell & Co., John A., Boston, Mass. "Curtis" .....	May 28, 1878	13	970
1,492	Lydon, E. S., Athens, Ga. "Worm Oil" .....	Apr. 23, 1878	13	730
1,811	Lynch, Alonzo K., Brooklyn, N. Y. "Advance Oil Works" .....	Dec. 10, 1878	14	862
1,493	Magee, George V., Philadelphia, Pa. "Parisian Dress Renovator" .....	Apr. 23, 1878	13	730
1,432	Magill, Henry A., Louisville, Ky. "Magill's Chill Cure" .....	Mar. 5, 1878	13	410
1,641	Marshall & Co., Milwaukee, Wis. "Australian Balm—The Best in the World" .....	July 30, 1878	14	160
1,350	Marshall, Mary W., Fond du Lac, Wis. "Marshall's Rheumatic Oil Liniment" .....	Jan. 8, 1878	13	48
1,351	Same..... "Marshall's Rheumatic Liniment," &c. ....	Jan. 8, 1878	13	48
1,305	Same..... "Marshall's Lung Syrup for Coughs, Colds," &c. ....	Feb. 5, 1878	13	232
1,396	Same..... "Marshall's Improved Condition Powder for Horses and Cattle" .....	Feb. 5, 1878	13	232
1,471	Martin, Charles S., New York, N. Y. "Martin's Ready Printed Perforated Addresses" .....	Apr. 9, 1878	13	638
1,676	Mauger, Victor E., New York, N. Y. "Chinkalypus" .....	Sept. 3, 1878	14	348
1,578	McCalvery, James, Frankford, Philadelphia, Pa. "The Eradicator" .....	June 18, 1878	13	1084
1,563	McKelway, George I., Philadelphia, Pa. "Syrup Glycerole of Ferrous Chloride" .....	June 4, 1878	13	1012
1,773	Medicated Cream Company, New York, N. Y. "Medicated Cream for External Application" .....	Nov. 12, 1878	14	716
1,520	Medlar, James B., Rockford, Ill. "Oil Gem" .....	May 7, 1878	13	820
1,521	Same..... "Ink Photo" .....	May 7, 1878	13	820
1,364	Melzer, A., Evansville, Ind. "Benzine Soap" .....	Jan. 22, 1878	13	125
1,445	Merchant's Tobacco Company, Boston, Mass. "Merchant's Tobacco Company, Boston" .....	Mar. 12, 1878	13	458
1,519	Merrell & Co., William S., Cincinnati, Ohio. "Fluid Hydrastis" .....	May 7, 1878	13	820
1,461	Miller & Co., John L., New York, N. Y. "The Great Novelty of the Age, etc." .....	Mar. 26, 1878	13	550
1,402	Miller, Frederic A., Philadelphia, Pa. "To Protect the Public Against Counterfeits," &c. ....	Feb. 12, 1878	13	278
1,787	Missionary Society at Mount Carmel Monastery, Anderson, Kans. "Aqua A. Santa Maria Della Scala, or Carmelite's Geist" .....	Nov. 26, 1878	14	788
1,433	Mozley, H., Saint Louis, Mo. "Dr. H. Mozley's Lemon Elixir," &c. ....	Mar. 5, 1878	13	410
1,505	Murphy, James J., Baltimore, Md. "Murphy's Irish Cough Syrup" .....	Apr. 30, 1878	13	774
1,646	Myers, Henry M., Beaver Falls, Pa. "H. M. Myers Patent Socket Strap Scoop" .....	Aug. 13, 1878	14	236
1,504	Same..... "H. M. Myers' Solid Steel" .....	Apr. 30, 1878	13	774
1,472	Newman, Charles T., Manchester, N. H. "Dr. B. Hasclton's Indian Liniment" .....	Apr. 9, 1878	13	638
1,585	Newman & Dinglinger, New York, N. Y. "Fearless" .....	June 25, 1878	13	1130
1,631	New York Dyeing and Printing Establishment, New York, N. Y. "Patent Radiant Jet Black" .....	July 23, 1878	14	120
1,714	New York Label Publishing Company of Nicholas Witsch and Jacob Schmidt, New York, N. Y. "Quintet" .....	Oct. 8, 1878	14	526
1,722	Same..... "No. 122" .....	Oct. 15, 1878	14	562
1,723	Same..... "No. 69" .....	Oct. 15, 1878	14	562
1,724	Same..... "No. 83" .....	Oct. 15, 1878	14	562
1,725	Same..... "No. 53" .....	Oct. 15, 1878	14	562
1,726	Same..... "No. 102" .....	Oct. 15, 1878	14	562
1,727	Same..... "U. S. M." .....	Oct. 15, 1878	14	562
1,728	Same..... "Carmen" .....	Oct. 15, 1878	14	562
1,747	Same..... "Arizona" .....	Oct. 29, 1878	14	636
1,748	Same..... "Just on Time" .....	Oct. 29, 1878	14	636
1,749	Same..... "Opera House" .....	Oct. 29, 1878	14	636
1,750	Same..... "Snow Flake" .....	Oct. 29, 1878	14	636
1,751	Same..... "Ocean Spray" .....	Oct. 29, 1878	14	636
1,752	Same..... "Uncle Sam's Delight" .....	Oct. 29, 1878	14	636
1,753	Same..... "La Vuetta" .....	Oct. 29, 1878	14	636
1,754	Same..... "Conversation" .....	Oct. 29, 1878	14	636
1,760	Same..... "Banquet" .....	Nov. 5, 1878	14	680
1,761	Same..... "Crack Shot" .....	Nov. 5, 1878	14	680
1,762	Same..... "Early Friends" .....	Nov. 5, 1878	14	680
1,763	Same..... "The Hurdle" .....	Nov. 5, 1878	14	680
1,764	Same..... "First Stroke" .....	Nov. 5, 1878	14	680
1,765	Same..... "Premier" .....	Nov. 5, 1878	14	680
1,766	Same..... "Campaign" .....	Nov. 5, 1878	14	680
1,813	Same..... "Blazes" .....	Dec. 10, 1878	14	862
1,485	Norton & Wiedner, Saint Louis, Mo. "St. Louis Villa and Cottage Paints" .....	Apr. 16, 1878	13	678
1,473	Ordway, Aaron P., Lawrence, Mass. "Dr. Kaufmann's Sulphur Bitters" .....	Apr. 9, 1878	13	638
1,536	Same..... "Dr. Ordway's Sulphur Sarsaparilla" .....	May 14, 1878	13	872
1,537	Same..... "Dr. Ordway's Sulphur Medical Discovery" .....	May 14, 1878	13	872
1,538	Same..... "Dr. Ordway's Sulphur Blood Purifier" .....	May 14, 1878	13	872
1,609	Ordway Brothers, Lawrence, Mass. "Dr. Kaufmann's Sulphur Porous Plaster" .....	July 2, 1878	14	8
1,352	Osborn, Francis C., Syracuse, N. Y. "The — Business Directory" .....	Jan. 8, 1878	13	48
1,608	Ottenheimer & Son, M., Baltimore, Md. "M. Ottenheimer & Son. Compressed Cooked Spiced Beef" .....	July 2, 1878	14	8
1,494	Painter & Calvert, San Francisco, Cal. "The Stock Ointment" .....	Apr. 23, 1878	13	730
1,778	Palmer & Co., James A., Philadelphia, Pa. "The Great Folsen Tea" .....	Nov. 19, 1878	14	750
1,522	Patch, John W., Boston, Mass. "Our Favorite Nursing Shield" .....	May 7, 1878	13	820
1,769	Pennington & Co., H., Philadelphia, Pa. "Java Mills" .....	Nov. 5, 1878	14	680
1,635	Same..... "Unrivaled" .....	Sept. 10, 1878	14	380



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*List of labels registered during the year 1878—Continued.*

No.	Name, residence, and title.	Date.	Official Gazette.	
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1,686	Pennington & Co., H., Philadelphia, Pa. "Royal" .....	Sept. 10, 1878	14	380
1,397	Perry, James A., Pawtucket, R. I. "Perry's Harness Oil Soap" .....	Feb. 5, 1878	13	252
1,713	Petersen, Christian G., New York, N. Y. "Antonio Y Cleopatra" .....	Oct. 8, 1878	14	556
1,595	Phillips, John E., Philadelphia, Pa. "Phillips' Handle Advertiser" &c .....	July 2, 1878	14	8
1,645	Pinkham, William H., Lynn, Mass. "Lydia E. Pinkham's Liver Pills" .....	Aug. 6, 1878	14	206
1,530	Pioneer Tobacco Company, The, Brooklyn, N. Y. "Wood Tag" .....	May 7, 1878	13	820
1,495	Place, Francis B., Sedalia, Mo. "Place's Salus Illuminating Gas" .....	Apr. 23, 1878	13	750
1,798	Plumb, James S., Syracuse, N. Y. "Rose Cream" .....	Dec. 8, 1878	14	84
1,812	Same "Siberian Chilliain Ointment" .....	Dec. 10, 1878	14	862
1,365	Pratt & Co., A. W., New York, N. Y. "A. W. Pratt & Co., Manufacturers of Varnishes," &c. ....	Jan. 22, 1878	13	125
1,626	Procter & Co., William, Jr., Philadelphia, Pa. "Vinum Digesturum (Digestive Wine)" .....	July 16, 1878	14	86
1,647	Raney, Andrew J., Nebraska City, Nebr. "Prof. A. J. Raney's Hog Cholera Compound" .....	Aug. 13, 1878	14	226
1,589	Ramsey, Thomas, Cleveland, Ohio. "Union Color Company" .....	June 25, 1878	13	11.0
1,621	Rappold, Otto C., Brooklyn, E. D., N. Y. "Wine, Beef, Cinchona, and Pyrophosphate of Iron" .....	July 9, 1878	14	48
1,446	Raymer, Thomas C., Chicago, Ill. "Pneumonic Compound Medicines for Swine" .....	Mar. 12, 1878	13	458
1,361	Reynolds, James E., East Orange, N. J. "Eureka Carpet Warp" .....	Jan. 15, 1878	13	11
1,743	Richards & Co., John, Philadelphia, Pa. "American Standard Gauge & Tool Works, Philadel- phia, U. S. A." .....	Oct. 20, 1878	14	606
1,419	Ricksecker, Theodore, New York, N. Y. "Ricksecker's Bay Rum Shaving Stick" .....	Feb. 10, 1878	13	326
1,420	Riker, William H. (See Riker, William B. and William H.) .....			
1,815	Riker, William B. and William H., New York, N. Y. "Riker's American Face Powder" .....	Feb. 10, 1878	13	376
1,742	Rochester, Samuel N., Saint Louis, Mo. "Rochester's Absorbing Cushion" .....	Dec. 10, 1878	14	862
1,474	Rose, C. P., Bristol, Pa. "Rose's Luxative Bonbons" .....	Oct. 29, 1878	14	626
1,596	Roseborough, J. E., Shiloh, Ohio. "Dr. J. E. Roseborough's Compound for Stomach and Heart" .....	Apr. 9, 1878	13	628
1,597	Ryerson, Joseph T., Chicago, Ill. "Central Iron Works Marine Flange" .....	July 2, 1878	14	8
1,598	Same "Central Iron Works Marine Flange, 55,000," &c. ....	July 2, 1878	14	8
1,599	Same "Central Iron Works S. F. B. 50,000," &c. ....	July 2, 1878	14	8
1,720	Same "Central Iron Works" .....	July 2, 1878	14	8
1,627	Sanger, William H., New York, N. Y. "Frank Wright's Liquid Glue" .....	Oct. 15, 1878	14	562
1,632	Schermerhorn, W. S., Castleton, N. Y. "Geneva Liniment" .....	July 16, 1878	14	86
1,523	Same "Geneva Tooth Wash" .....	July 23, 1878	14	120
1,801	Schmidt & Co., New York, N. Y. "Puro Habana" .....	May 7, 1878	13	82.0
1,802	Schoenberg & Co., E., Baltimore, Md. "Peaches" .....	Dec. 3, 1878	14	84
1,803	Same "Tomatoes" .....	Dec. 3, 1878	14	84
1,804	Same "Green Peas" .....	Dec. 3, 1878	14	84
1,805	Same "Sugar Corn" .....	Dec. 3, 1878	14	84
1,541	Same "Fresh Cove Oysters" .....	Dec. 3, 1878	14	84
1,524	Schumacher & Ettlinger, New York, N. Y. "Amorosis" .....	May 14, 1878	13	872
1,635	Scott, Charles L., Philadelphia, Pa. "Scott's Coconut Macaroons" .....	May 7, 1878	13	820
1,600	Scott, Samuel S., Dubuque, Iowa. "Sam'l S. Scott's Great Hair Restorative" .....	July 23, 1878	14	120
1,475	Sheldon, Andrew C., Nevada, Iowa. "Baron Gerard Menck's Preserving Compound" .....	July 2, 1878	14	8
1,677	Sherman, Robert H., Norwich, Conn. "Dr. Buton's Coffee" .....	Apr. 9, 1878	13	638
1,453	Simmons & Staiger, Leavenworth, Kans. "El Prince" .....	Sept. 3, 1878	14	348
1,434	Simpson, Sons & Co., William, Philadelphia, Pa. "Merino Finish" .....	Mar. 10, 1878	13	501
1,435	Sloan & Co., Philadelphia, Pa. "Bunsen's Dyspepsia Cure" .....	Mar. 5, 1878	13	410
1,436	Same "Byerly's Gonorrhea Mixture" .....	Mar. 5, 1878	13	410
1,500	Same "Sloan's Lacto-Phosphate of Lime, Iron and Cod-Liver Oil" .....	Mar. 5, 1878	13	410
1,372	Smith & Co., L. A. L., Palatine, Ill. "Prof. Dykes' Beard Elixir" .....	June 25, 1878	13	1170
1,437	Smith, M. W., and F. C. Fairbanks, Chicago, Ill. "Sunday School Class Box" .....	Jan. 22, 1878	13	125
1,437	Smith, Marcus W., and Charles F. Fairbanks, Chicago, Ill. "Fairbanks' Improved Class-Collection Box" .....	Mar. 5, 1878	13	410
1,648	Smith, Sanford & Co., New York, N. Y. "Mohawk Valley M'fg Co. Cambrics" .....	Aug. 13, 1878	14	256
1,579	Smith, Thomas B., Covington, Ky. "Smith's Agricultural Liniment" .....	June 18, 1878	13	1084
1,438	Snyder, Albert, Sherman, Tex. "Design for Medicine Label" .....	Mar. 5, 1878	13	410
1,680	Soler & Guardias, New York, N. Y. "Guardias' Ointment" .....	Aug. 20, 1878	14	272
1,659	Spaulding, Roger S., Woburn, Mass. "Spanish Cholera Remedy" .....	Aug. 20, 1878	14	272
1,771	Stamm, Andreas, Chicago, Ill. "Dr. Maria F. Haller's Wiener Krauter-Thee" .....	Nov. 12, 1878	14	716
1,772	Same "Dr. Maria F. Haller's Wiener Balsam" .....	Nov. 12, 1878	14	716
1,759	Staples & Ross, New York, N. Y. "Laimun Citrus, The Book-Keeper's Friend" .....	Nov. 5, 1878	14	680
1,421	Steinman Jewelry Company, Cincinnati, Ohio. "Imperial Casket" .....	Feb. 10, 1878	13	326
1,496	Stevens, Alfred T., Brooklyn, N. Y. "Household Mixed Paint" .....	Apr. 23, 1878	13	750
1,697	Stevens, Gilbert L., Meadville, Pa. "Persian Kababa" .....	Sept. 24, 1878	14	450
1,706	Stewart & Barry, Indianapolis, Ind. "Red Tonic Pills" .....	Oct. 1, 1878	14	488
1,366	Stewart, Ralph & Co., Philadelphia, Pa. "Ralph's Scotch Snuff" .....	Jan. 22, 1878	13	125
1,367	Same "Ralph's Carolina Snuff" .....	Jan. 22, 1878	13	125
1,368	Same "Scotch Snuff of a Very Superior Quality" .....	Jan. 22, 1878	13	125
1,369	Same "Ralph's Scotch Snuff" .....	Jan. 22, 1878	13	125
1,370	Same "Stewart, Ralph & Co., Manufacturers of Scotch Snuff" .....	Jan. 22, 1878	13	125
1,549	Stone, Robert T., and John Friend, Petersburg, Va. "Cook's Root and Herb Alternative" .....	May 21, 1878	13	918
1,669	Strong, Lizzie, Louisville, Ky. "Madam Le Beautiller's Elixir of Youth Lotion" .....	Aug. 27, 1878	14	310
1,569	Stuart, Charles R., Cleveland, Ohio. "Hop Tonic" .....	June 11, 1878	13	1048
1,668	Same "same" .....	Aug. 27, 1878	14	310
1,788	Sutton, John R., Brooklyn, N. Y. "South American Wrapper" .....	Nov. 26, 1878	14	768
1,530	Swart, O. A., Margaretville, N. Y. "English Feed for Horses and Cattle" .....	May 14, 1878	13	872
1,540	Sweetser, Frederick, New York, N. Y. "Hillsdale M. T. G. Company" .....	May 14, 1878	13	872
1,371	Sylvester & Dunn, San José, Cal. "Sylvester's Cure for Neuralgia and Diphtheria" .....	Jan. 22, 1878	13	125
1,653	Taft & Co., Providence, R. I. "Holland Shades" .....	Aug. 13, 1878	14	236
1,476	Tarr, C. A., Biddeford, Me. "Tarr's Pain Cure" .....	Apr. 9, 1878	13	638
1,525	Tennessee Manufacturing Company, Nashville, Tenn. "Rock City Sheetting" .....	May 7, 1878	13	820
1,486	Thompson & Bedford, New York, N. Y. "Mineral Olive Oil" .....	Apr. 16, 1878	13	678
1,382	Thomson, Langdon & Co., New York, N. Y. "The Never-Break Corset Clasp" .....	June 20, 1878	13	180
1,447	Same "The Amazon Steel" .....	Mar. 12, 1878	13	458
1,661	Same "Thomson's Unbreakable" .....	Aug. 20, 1878	14	272
1,662	Same "Thomson's Toiso Corset" .....	Aug. 20, 1878	14	272
1,615	Thornnton, A. B., Boonville, Mo. "The Egg Preserver" .....	July 9, 1878	14	48
1,664	Tibbals, Abbott & Co., Philadelphia, Pa. "Prentiss' Extract of Jamaica Ginger" .....	Aug. 27, 1878	14	310
1,665	Same "Perfection Blacking" .....	Aug. 27, 1878	14	310
1,506	Townsend, Wilson & Co., Providence, R. I. "Wilson's Salicylated Pure Castile Soap" .....	Apr. 30, 1878	13	774
1,507	Same "Carburretted Acid Phosphate," &c. ....	Apr. 30, 1878	13	774
1,734	Trenholm, F. H., Charleston, S. C. "By Trenholm's Patent Locked Cart" .....	Oct. 22, 1878	14	602
1,373	Walcott, E. H., Natick, Mass. "Walcott's Remedy for Pain" .....	Jan. 22, 1878	13	125
1,543	Walz, Alphonse, New Orleans, La. "Malakof Bitters" .....	May 14, 1878	13	872
1,770	Wanamaker, John, Philadelphia, Pa. "Sample Label" .....	Nov. 19, 1878	14	750
1,467	Wardwell, Lyman E. (See Howard & Wardwell.) Warner & Co., William R., Philadelphia, Pa. "Parvules" .....	Apr. 2, 1878	13	598



## List of labels registered during the year 1878—Continued.

No.	Name, residence, and title.	Date.	Official Gazette.	
			Vol.	Page.
1,687	Warner & Co., William R., Philadelphia, Pa. "Carbolated Iron" .....	Sept. 10, 1878	14	880
1,593	Warrcock, Londwick, Jacksonville, Fla. "Florida Orange Marmalade" .....	June 25, 1878	13	1130
1,789	Waters, Frank, New York, N. Y. "Dr. Waters' Hair Restorer" .....	Nov. 26, 1878	14	788
1,735	Weatherill, Henry G., Elgin, Ill. "The New Elgin Stove Polish, &c." .....	Oct. 22, 1878	14	002
1,820	Same..... "Chicago Stove Polish" .....	Dec. 17, 1878	14	904
1,622	Weller & Co., Saint Louis, Mo. "Conzath's Complexion Powder" .....	July 9, 1878	14	48
2,403	Wells, Schuyler C., Le Roy, N. Y. "Shiloh's Belladonna Plaster" .....	Feb. 12, 1878	13	278
1,422	Wenck & Belter, New York, N. Y. "Wenck's American Cologne" .....	Feb. 19, 1878	13	326
1,755	West, William, Malden, Mass. "West's English Medicated Black Currant Cough Lozenge" .....	Oct. 29, 1878	14	036
1,478	Western File Company (limited), Beaver Falls, Pa. "Economy Works, Cast Steel Files" .....	Apr. 9, 1878	13	638
1,479	Same..... "Western File Works" .....	Apr. 9, 1878	13	638
1,480	Same..... "Beaver File Works" .....	Apr. 9, 1878	13	638
1,497	Same..... "Western Files" .....	Apr. 23, 1878	13	730
1,498	Same..... "Beaver File Works" .....	Apr. 23, 1878	13	730
1,499	Same..... "Economy Works, Superior Files" .....	Apr. 23, 1878	13	730
1,477	Western Manufacturing Company, San Francisco, Cal. "No. 1 Laundry Blueing, etc." .....	Apr. 9, 1878	13	638
1,542	Same..... "Edwards' Superior Laundry Blueing" .....	May 14, 1878	13	872
1,736	Western White Lead Company, Philadelphia, Pa., and Chicago, Ill. "Pure Silver Coin White Lead" .....	Oct. 22, 1878	14	602
1,698	Wetherill, Samuel P., Philadelphia, Pa. "Pure Sublimed White Lead" .....	Sept. 24, 1878	14	450
1,562	Whipple & Co., W. W., Portland, Me. "Wallingford's Garget Cure" .....	May 28, 1878	13	070
1,526	Whitlock, P., Richmond, Va. "Whitlock's Key West" .....	May 7, 1878	13	820
1,729	Whittaker, John, Saint Louis, Mo. "Jno. Whittaker's Summer Sugar Cured Hams" .....	Oct. 15, 1878	14	562
1,557	Wicke & Co., William, New York, N. Y. "La Eminengia" .....	May 28, 1878	13	970
1,591	Same..... "May Queen" .....	June 25, 1878	13	1130
1,806	Same..... "Ætna" .....	Dec. 3, 1878	14	824
1,814	Same..... "Hortensia" .....	Dec. 10, 1878	14	862
1,509	Willard, Osborne J., Mayville, N. Y. "The Chautauque Tin-Lined Butter Package" .....	Apr. 30, 1878	13	774
1,581	Williams & Co., M. F., Gettysburg, Pa. "Williams' Vegetable Pain Exterminator" .....	June 18, 1878	13	1084
1,592	Williams & Moore, Stockton, Cal. "Williams & Moore's Mexican Insect Powder" .....	June 25, 1878	13	1130
1,633	Williamson & Burnley, Hazlehurst, Miss. "The Great National Remedy" .....	July 23, 1878	14	120
1,383	Willimantic Linen Company, Hartford, Conn. "Willimantic Six-Cord, Warranted 200 yards, White 12" .....	Jan. 20, 1878	13	180
1,384	Same..... "American Silk-Finish Spool-Cotton" .....	Jan. 29, 1878	13	180
1,385	Same..... "Reid's Six Cord Thread" .....	Jan. 29, 1878	13	180
1,721	Wilson & Co., Walter G., Philadelphia, Pa. "Walter G. Wilson & Co.'s Beef Fibrine Biscuit" .....	Oct. 15, 1878	14	562
1,404	Wood, Mary M., Brooklyn, N. Y. "Wood's Saccharine Antiseptic" .....	Feb. 12, 1878	13	278
1,344	Woodard, Henry S., Bloomington, Ill. "Dr. Z. Waters' Indian Vegetable Cathartic and Liver Pills" .....	Jan. 1, 1878	13	8
1,345	Same..... "Dr. Z. Waters' Raspberry Balsam" .....	Jan. 1, 1878	13	8
1,346	Same..... "Dr. Z. Waters' Honey Balsam" .....	Jan. 1, 1878	13	8
1,654	Woodward, George Y., Louisville, Miss. "Woodward Vegetable Liver Renovator" .....	Aug. 13, 1878	14	236
1,580	Worden, Homer, New York, N. Y. "The Fashionable Ink Perfumed" .....	June 18, 1878	13	1084
1,745	Van Buren, Barent, Chicago, Ill. "Van Buren's Rheumatic Compound" .....	Oct. 29, 1878	14	636
1,614	Zeigler & Co., J. Walter, Sunbury, Pa. "Zeigler's Aguo Pad" .....	July 9, 1878	14	48
1,336	Zentgray, Charles F., New York, N. Y. "Nuremberg Ultramarine Works Wash Blue In Balls" .....	Jan. 1, 1878	18	8
1,527	Ziegler, P. W., and N. W. Case, Philadelphia, Pa. "Dr. Case's Cough Cordial" .....	May 7, 1878	13	820
1,528	Same..... "Dr. Case's Liniment and Cancer Cure" .....	May 7, 1878	13	820
1,529	Same..... "Dr. Case's Liver Remedy" .....	May 7, 1878	13	820
1,360	Zinsser & Co., William, New York, N. Y. "Preserving Fluid for Bottle and Export Lager Beer and Ale" .....	Jan. 15, 1878	13	11

## DISCLAIMERS.

No.	Name, residence, and invention.	Date of filing disclaimer.	Official Gazette.	
			Vol.	Page.
170, 217	Allen, Horace R., Indianapolis, Ind. Limb-receiver .....	Jan. 28, 1878	-----	-----
187, 699	Billings, John D., and Marcus A. Decker, New York, N. Y. Horseshoe .....	Oct. 5, 1878	14	526
87, 241	Burdett, Riley, Chicago, Ill. Reed organ .....	Nov. 29, 1878	14	824
168, 385	Edison, Thomas A., Newark, N. J. Duplex telegraph .....	Nov. 16, 1878	14	750
192, 643	Edwards, Oliver, Florence, Mass. Skate .....	May 9, 1878	13	872
4, 588	Page, Priscilla Webster, Washington, D. C., administratrix of the estate of Charles Grafton Page, deceased, assignor of one-half her right to the Western Union Telegraph Company, New York. Induction coil apparatus and circuit-breaker. (Reissue) .....	June 18, 1878	13	1084
194, 616	Potter, Thomas O., and Albert Nichols, assignee, Boston, Mass. Suspenders .....	Jan. 9, 1878	13	8
6, 580	Root, S. Emerson, Bristol, Conn. Clock-dial. (Reissue) .....	Dec. 28, 1877	13	8
4, 865	Stuart, David, and R. Peterson, Philadelphia, Pa. Providing projections for kettles, &c. (Reissue) .....	May 28, 1878	13	918
84, 517	Terry, Silas B., Waterbury, Conn. Clocks .....	July 5, 1878	14	48

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A.							
Accordion.....	T. Meinhold.....	207,759	Sept. 3, 1878	179	55	14	371
Accordion.....	W. Spaethe.....	210,217	Nov. 26, 1878	763	227	14	794
Accordion-key.....	F. Zogbaum.....	201,974	Apr. 2, 1878	111	33	13	615
Acid, Manufacture of acetic.....	A. Priz.....	209,978	Nov. 19, 1878	494	.....	14	754
Acid, Manufacture of acetic.....	A. Priz.....	209,979	Nov. 19, 1878	495	.....	14	754
Acid, Manufacture of tartaric.....	F. Dietrich.....	199,039	Jan. 8, 1878	326	.....	13	66
Acid, Process and apparatus for recovering waste sulphuric.....	F. F. Farrar and F. P. Gill.....	206,309	July 23, 1878	964	274	14	143
Acid, Recovering waste sulphuric.....	A. Pérrissat.....	204,244	May 28, 1878	1110	.....	13	984
Adding-machine.....	E. L. Bill.....	209,644	Nov. 5, 1878	118	35	14	607
Adding-machine.....	W. P. Borland and H. Hoffmann.....	205,993	July 16, 1878	598	172	14	98
Adding-machine.....	M. W. Clay.....	207,255	Aug. 20, 1878	634	189	14	292
Adding-machine.....	M. W. Hinkle.....	200,911	Mar. 5, 1878	92	32	13	429
Adding-machine.....	R. R. James.....	209,690	Nov. 5, 1878	167	40	14	703
Adding-machine.....	M. Norgren.....	209,977	Nov. 19, 1878	493	150	14	754
Adding-stick.....	R. F. Roche.....	206,136	July 16, 1878	749	215	14	112
Addressing-machine.....	C. C. Doten.....	206,303	July 23, 1878	956	271	14	142
Addressing-machine.....	J. Piner.....	210,960	Dec. 17, 1878	647	179	14	924
Adjustable chair.....	G. Wilson.....	210,733	Dec. 10, 1878	378	103	14	881
Advertiser, Clock.....	J. F. Werner.....	200,009	Feb. 5, 1878	112	37	13	251
Advertising-apparatus.....	E. Postock and L. T. Simon.....	202,325	Apr. 16, 1878	513	150	13	679
Advertising-apparatus.....	A. S. Lovett.....	201,257	Mar. 12, 1878	444	137	13	488
Advertising-apparatus.....	N. T. Scott.....	202,966	Apr. 30, 1878	1217	352	13	781
Advertising-apparatus, Automatic.....	O. J. McGann and G. A. Jenks.....	210,547	Dec. 3, 1878	170	45	14	845
Advertising-card.....	O. J. Ramsdell.....	206,969	Aug. 13, 1878	330	101	14	251
Advertising-case, Revolving.....	R. C. Millings.....	199,806	Jan. 15, 1878	609	178	13	111
Advertising-device.....	J. D. McFarland.....	209,352	Oct. 29, 1878	907	290	14	642
Advertising-device, Automatic.....	H. V. Raymond and G. H. Chinnock.....	206,827	Aug. 6, 1878	172	54	14	228
Advertising-device, Illuminating.....	G. H. Chatterton.....	206,861	Aug. 13, 1878	225	72	14	239
Advertising-lantern.....	H. Sylvester.....	199,122	Jan. 8, 1878	414	122	13	80
Advertising-medium.....	B. C. Baker.....	202,214	Apr. 9, 1878	377	111	13	656
Advertising-medium.....	I. Randall.....	198,953	Jan. 8, 1878	243	70	13	53
Advertising merchandise-car.....	A. H. Burhans.....	210,595	Dec. 10, 1878	234	64	14	863
Aerated-liquor apparatus.....	T. C. Knox.....	206,035	July 16, 1878	626	181	14	97
Aerial observatory.....	N. C. Lombard.....	199,986	Feb. 5, 1878	94	31	13	248
Aerial paddle-wheel.....	R. W. Cowan and C. Page.....	204,296	May 28, 1878	1161	332	13	990
Aerial vessel.....	F. A. L. Von Ehren.....	199,334	Jan. 15, 1878	637	186	13	115
Aging and improving distilled liquors, Process and apparatus for.....	M. Lansburgh.....	210,863	Dec. 17, 1878	526	{ 148 149 }	{ 14 14 }	{ 910 911 }
Aging liquors.....	P. E. Jay.....	201,679	Mar. 26, 1878	904	276	13	504
Agricultural boiler.....	M. Mathews and A. L. L. Seoville.....	206,744	Aug. 6, 1878	89	28	14	218
Agricultural boiler.....	H. Voth, G. P. Sackenreuther, and C. Heft.....	210,231	Nov. 26, 1878	775	230	14	795
Air and forcing beer, Apparatus for compressing.....	G. W. Harvey and W. D. Seal.....	210,943	Dec. 17, 1878	629	174	14	922
Air and gas heating apparatus.....	T. Whitwell.....	199,388	Jan. 22, 1878	701	{ 205 206 207 }	{ 13 13 13 }	{ 133 133 133 }
Air and steam brake pipe on cars, Coupling.....	F. A. Sheeley.....	204,383	May 28, 1878	1251	356	13	1002
Air and steam engine.....	H. E. Depp.....	201,874	Apr. 2, 1878	16	5	13	601
Air-brake.....	S. F. Prince, jr.....	204,914	June 18, 1878	538	157	13	1009
Air-brake.....	W. G. Raoul.....	203,647	May 14, 1878	443	126	13	888
Air-brake coupling.....	G. H. Newton.....	202,368	Apr. 16, 1878	555	162	13	685
Air-brake for cars.....	J. M. Maxwell.....	207,126	Aug. 20, 1878	502	151	14	276
Air-brake, Railway.....	H. F. Knapp.....	204,440	June 4, 1878	26	9	13	1016
Air, Compressing.....	J. P. Frizell.....	199,819	Jan. 20, 1878	1155	339	13	212
Air compressing and purifying machine.....	I. Dreyfus.....	200,901	Mar. 5, 1878	84	29	13	428
Air-compressing apparatus.....	T. G. Springer.....	211,062	Dec. 17, 1878	778	214	14	939
Air-compressor.....	W. D. Doremus.....	207,954	Sept. 10, 1878	396	120	14	402
Air-cooling apparatus.....	A. Albertson.....	198,830	Jan. 1, 1878	108	31	13	25
Air-cooling apparatus.....	R. B. Williamson.....	200,157	Feb. 12, 1878	277	83	13	284
Air-engine.....	A. K. Rider.....	206,356	July 23, 1878	1023	{ 292 293 }	{ 14 14 }	{ 150 150 }
Air-filter for houses.....	E. N. Dickerson.....	199,357	Jan. 22, 1878	672	197	13	128
Air-forcing apparatus.....	O. Millard.....	203,752	May 14, 1878	555	157	13	902
Air-forcing engine.....	J. C. Stentermann.....	209,524	Oct. 29, 1878	1175	341	14	668
Air-heater, Fire-place.....	L. Johnston.....	207,526	Aug. 27, 1878	933	274	14	335
Air, Machine for purifying and compressing.....	R. Wildon.....	202,083	Apr. 2, 1878	224	65	13	639
Air-register.....	E. A. Tuttle.....	208,350	Sept. 24, 1878	843	246	14	468
Air-ship.....	J. F. Cameron.....	210,238	Nov. 26, 1878	785	233	14	797
Air-tight vessel.....	T. H. Shahan.....	209,297	Oct. 22, 1878	927	270	14	629
Alarm:							
See Bell-alarm.....	Fire-alarm.....						
Burglar-alarm.....	Knob-alarm.....						
Electric alarm.....	Locomotive-alarm.....						
Alarm circuit-closer.....	J. F. Callaway.....	201,991	Apr. 2, 1878	128	38	13	617
Alarm-lock.....	T. B. Lumpkin and W. D. Benson.....	210,546	Dec. 3, 1878	169	45	14	845
Alarm-lock.....	J. G. Wolf.....	200,235	Feb. 12, 1878	348	104	13	295
Alarm-register.....	G. C. Smith.....	201,295	Mar. 12, 1878	485	149	13	494
Alarm-register.....	T. Vosburgh.....	209,946	Nov. 12, 1878	445	135	14	744
Album.....	J. C. Koch, jr.....	199,982	Feb. 5, 1878	92	30	13	247
Album, Easel.....	J. C. Koch, jr.....	200,922	Mar. 5, 1878	102	34	13	431
Alkali balls, Composition for coating.....	A. Mendleson.....	206,891	Aug. 13, 1878	262	.....	14	242
Alkalies and preparations of alumina, Manufacture of caustic.....	C. Löwig.....	201,028	Mar. 5, 1878	207	.....	13	447
Alkalies, Apparatus for the manufacture of caustic.....	E. W. Parnell.....	203,555	May 14, 1878	358	101	13	877

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Alkalies, Manufacture of caustic	E. W. Parnell	203, 761	May 14, 1878	562	.....	13	903
Alloy, Bronze	E. C. Kirk	201, 536	Mar. 19, 1878	749	.....	13	537
Alloy containing manganese, Manufacture of copper	P. M. Parsons	206, 004	July 30, 1878	1305	.....	14	189
Alloy for coin	W. W. Hubbell	209, 263	Oct. 22, 1878	891	.....	14	625
Alloy for the manufacture of shot	T. W. Sparks	204, 856	June 11, 1878	454	.....	13	1076
Alloy to be used with other alloys	E. A. C. Du Plaine	209, 240	Oct. 22, 1878	871	.....	14	622
Alloys, Manufacture of manganese	R. Hale	203, 266	May 7, 1878	30	.....	13	825
Alphabet-block	A. G. Trickey	209, 307	Oct. 22, 1878	936	273	14	630
Alum-cake and sulphate of alumina, Manufacture of	G. T. Lewis	209, 488	Oct. 29, 1878	1133	.....	14	062
Alumina, Manufacture of sulphate of	F. Laur	208, 615	Oct. 1, 1878	158	.....	14	510
Amalgam, Refining retorted	F. Gutzkow	205, 187	June 25, 1878	824	.....	13	1133
Amalgamating and washing ores, Apparatus for	G. J. Firmin and T. A. D. Forster	207, 023	Aug. 13, 1878	384	118	14	257
Amalgamating chloridized ores	J. O. Stewart	204, 773	June 11, 1878	367	110	13	1065
Amalgamator	C. P. Bowen	208, 509	Oct. 1, 1878	52	17	14	496
Amalgamator	S. C. Charles	202, 703	Apr. 23, 1878	931	205	13	740
Amalgamator	G. J. Firmin and T. A. D. Forster	202, 804	Apr. 23, 1878	1037	298 299	13	755
Amalgamator	J. H. Hobart and C. W. Steward	203, 916	May 21, 1878	736	211	13	933
Amalgamator	E. L. Newberry	204, 447	June 4, 1878	32	10	13	1017
Amalgamator	E. L. Newell	206, 257	July 23, 1878	902	257	14	135
Amalgamator	G. O'Brien	199, 095	Jan. 8, 1878	381	113	13	76
Amalgamator	C. C. Peck	210, 465	Dec. 3, 1878	70	20	14	834
Amalgamator	I. M. Phelps	198, 904	Jan. 1, 1878	189	53	13	38
Amalgamator	W. Purvine	203, 075	Apr. 30, 1878	1319	383	13	795
Amalgamator	E. F. Russell	205, 215	June 25, 1878	854	253	13	1137
Amalgamator for stamp-mills	L. M. Boardman	201, 321	Mar. 19, 1878	531	163	13	507
Amalgamator, Ore	J. B. Le Clerc and M. A. Cachot	199, 724	Jan. 29, 1878	1065	311	13	198
Amalgamator, Ore	I. M. Phelps	200, 335	Feb. 12, 1878	456	135	13	311
Amalgamator, Ore	W. S. Shotwell	202, 595	Apr. 16, 1878	797	230	13	715
Ammonia or ether machine	E. Moreau and J. W. Haggerty	205, 120	June 18, 1878	739	220	13	1117
Anchor	G. S. Sidelinger	203, 660	May 14, 1878	456	130	13	890
Anchor	R. R. Spedden and D. F. Stafford	200, 673	Feb. 26, 1878	823	242	13	383
Anchor	A. A. Stimson	199, 874	Jan. 29, 1878	1203	353	13	219
Anchor	T. A. Swinburne	203, 087	Apr. 30, 1878	1331	387	13	796
Anchor-fluke supporter and tripper	E. Robbins	207, 445	Aug. 27, 1878	845	250	14	324
Anchor for boats, &c	E. N. Twiss	202, 448	Apr. 16, 1878	669	196	13	702
Aniline and its homologues, Coloring-matter derived from	F. Z. Roussin	210, 054	Nov. 19, 1878	572	.....	14	765
Animal-trap	A. H. Barber	199, 775	Jan. 29, 1878	1111	326	13	205
Animal-trap	J. P. Boyers	203, 109	Apr. 30, 1878	1350	293	13	799
Animal-trap	J. Edge	209, 388	Oct. 29, 1878	1032	300	14	647
Animal-trap	F. Egge	207, 406	Aug. 27, 1878	799	237	14	319
Animal-trap	F. J. Gaynor	208, 386	Sept. 24, 1878	877	255	14	472
Animal-trap	A. H. Hoy	206, 240	July 23, 1878	884	252	14	133
Animal-trap	A. W. Holland and E. M. McKinn	209, 397	Oct. 29, 1878	1039	302	14	648
Animal-trap	C. Isbell	210, 040	Nov. 19, 1878	559	168	14	763
Animal-trap	J. H. King	207, 528	Aug. 27, 1878	934	275	14	335
Animal-trap	R. Lynox	210, 242	Nov. 26, 1878	899	263	14	811
Animal-trap	D. McGuire	199, 987	Feb. 5, 1878	95	31	13	248
Animal-trap	J. McMahon	201, 546	Mar. 19, 1878	759	231	13	539
Animal-trap	G. W. McMillon	204, 064	May 21, 1878	896	256	13	953
Animal-trap	B. H. Neelting	209, 068	Oct. 15, 1878	681	197	14	591
Animal-trap	J. H. and W. Morris	203, 361	May 7, 1878	129	38	13	838
Animal-trap	D. R. Nichols	204, 753	June 11, 1878	342	104	13	1063
Animal-trap	J. A. Palmer	200, 930	Mar. 5, 1878	109	37	13	432
Animal-trap	E. B. Ripley	200, 221	Feb. 12, 1878	334	101	13	293
Animal-trap	S. Sewall, jr.	206, 836	Aug. 6, 1878	183	58	14	229
Animal-trap	J. Shrader	201, 293	Mar. 12, 1878	482	148	13	493
Animal-trap	S. Snell	204, 102	May 21, 1878	937	268	13	958
Animal-trap	E. P. Terrell	210, 578	Dec. 3, 1878	209	55	14	850
Animal-trap	S. H. Wiesedeppe	210, 071	Nov. 19, 1878	554	177	14	767
Animal-trap	H. T. Wigginton	202, 971	Apr. 30, 1878	1222	353	13	782
Animals, Device for marking	C. P. Housum and H. W. Hill	204, 736	June 11, 1878	325	99	13	1061
Animals, Shelter for	W. Heaton	202, 648	Apr. 23, 1878	873	250	13	734
Animals, Tag for marking	C. P. Housum	206, 569	July 30, 1878	1270	365	14	185
Annealing-furnace	E. H. Hill	208, 734	Oct. 8, 1878	296	85	14	536
Annealing-furnace	W. S. McKenna	209, 130	Oct. 22, 1878	764	222	14	607
Annunciator	A. B. Lyman	206, 681	Aug. 6, 1878	26	7	14	210
Annunciator	F. W. Mallett	211, 031	Dec. 17, 1878	739	202	14	935
Annunciator-alarm switch	A. Gerard	205, 540	July 2, 1878	81	23	14	19
Annunciators, &c., Electric conductor for elevator	T. L. Reed	200, 569	Feb. 19, 1878	696	205	13	356
Anodes, Apparatus for holding grain-nickel	A. C. Wenzel	208, 003	Sept. 10, 1878	432	136	14	409
Anti-attrition compound	J. Kimball	207, 874	Sept. 10, 1878	314	.....	14	392
Antiseptic composition	F. Jourdes	199, 209	Jan. 15, 1878	514	.....	13	96
Anvil and vise combined	E. E. Leach	203, 167	Apr. 30, 1878	1416	413	13	807
Apiary or bee-house	W. Erwin	207, 958	Sept. 10, 1878	404	122	14	403
Apple-corer	J. A. Morrow	205, 122	June 18, 1878	741	220	13	1117
Apple-corer	E. E. Orendorff	198, 954	Jan. 8, 1878	244	70	13	53
Apple corer and slicer	J. Pfeifer and A. Ulrich	206, 967	Aug. 13, 1878	329	100 101	14	250
Apple corer and slicer	C. B. Veronce	203, 221	Apr. 30, 1878	1470	430	13	814
Apple-worm, Device for trapping the	A. Greenman	203, 336	May 7, 1878	104	30	14	834
Aquarium-frames, &c., Plastic composition for the manufacture of	A. Kempenner	210, 204	Nov. 26, 1878	751	223	19	792
Arbor for gardens	I. Clark	199, 353	Jan. 22, 1878	666	195	13	128
Areas, vaults, &c., Covering, lighting, and ventilating	T. Hyatt	206, 571	July 30, 1878	1272	365 366	14	185
Arithmetical block	H. H. Hill	205, 960	July 16, 1878	564	161	14	89
Arithmetical results, Obtaining	J. Sawyer	208, 037	Sept. 17, 1878	501	149	14	421
Arm-chair and step-ladder combined	W. Witthoft	206, 205	July 23, 1878	849	242	14	178
Artificial tree	J. G. Wolf	202, 085	Apr. 2, 1878	225	66	13	631
Artificial tree and flowers	F. C. Bowen	206, 387	July 30, 1878	1074	307	14	161
Ash box and sifter, Combined	C. K. Ramsey	208, 266	Sept. 24, 1878	758	222	14	457
Ashes, Apparatus for separating breeze from	J. Coyne	201, 390	Mar. 19, 1878	600	184	13	517

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Asphalt for roofing, &c., Comminuted	H. W. Johns	205,750	July 9, 1878	324	.....	14	53
Asphaltum or cement pipe	M. Allen	206,290	July 23, 1878	943	267	14	140
Atomizer.	G. A. Brug	207,849	Sept. 10, 1878	283	87	14	368
Atomizer.	W. L. Hubbell	205,389	June 25, 1878	1039	309	13	1161
Atomizer.	C. Weed	204,469	June 4, 1878	52	17	13	1020
Atomizer.	H. Weinhausen	201,967	Apr. 2, 1878	102	30	13	614
Atomizer.	L. Wilkinson	201,898	Apr. 2, 1878	39	11	13	604
Auger	W. Hancy	208,687	Sept. 17, 1878	546	163	14	427
Auger.	H. L. Shaler	198,857	Jan. 1, 1878	136	39	13	30
Auger.	H. L. Shaler	202,061	Apr. 2, 1878	200	58	13	627
Auger.	G. F. Stearns	205,218	June 25, 1878	860	254	13	1138
Auger.	T. W. Wissinger	199,391	Jan. 22, 1878	707	208	13	134
Auger and reamer, Combined.	A. E. Brockett	201,908	Apr. 2, 1878	50	13	13	606
Auger-bits, Manufacture of.	J. Swan	208,892	Oct. 8, 1878	441	128	14	555
Auger-bits, Manufacture of.	J. Swan	209,782	Nov. 12, 1878	273	82	14	722
Auger, Coal-mining.	D. W. Siprell	203,785	May 14, 1878	590	165	13	906
Auger, Earth	B. F. Mull	203,637	May 14, 1878	430	123	13	887
Auger, Earth	O. H. Polley	202,864	Apr. 23, 1878	1100	315	13	762
Auger-handle	W. A. Lovett	205,096	June 18, 1878	718	213	13	1114
Auger-handle	J. D. Lovett and C. D. Gibson	207,667	Sept. 3, 1878	84	26	14	360
Auger, Hollow	G. N. Stearns	201,064	Mar. 5, 1878	242	77	13	452
Auger, Hollow	G. N. Stearns	203,354	May 7, 1878	156	45	13	841
Auger, Well	J. Curley and W. F. Warren	210,301	Nov. 26, 1878	851	250	14	805
Auger, Well	J. T. Glass	204,025	May 21, 1878	858	245	13	948
Auger, Well	D. N. Root	201,950	Apr. 2, 1878	86	25	13	611
Augers, Manufacture of	H. L. Shaler	203,079	Apr. 30, 1878	1323	385	13	795
Augers, Manufacture of	W. Tucker	208,651	Oct. 1, 1878	201	57	13	516
Awning	E. De Courcy	199,193	Jan. 8, 1878	498	147	13	94
Awning	W. B. Doolittle	205,064	June 18, 1878	685	201	13	1110
Awning	J. Koenig	203,923	May 21, 1878	744	214	13	934
Awning, Blind	C. P. Dearborn	202,935	Apr. 30, 1878	1186	342	13	777
Awning-fastening	W. H. Maey	210,689	Dec. 10, 1878	343	94	14	877
Awning-frame	C. Knudsen	202,272	Apr. 9, 1878	439	128	13	665
Awning, Metallic.	E. O. Pohl	208,092	Oct. 8, 1878	255	73	14	530
Awning, Window	J. Cain	198,792	Jan. 1, 1878	76	20	13	19
Ax	T. K. Downing	202,159	Apr. 9, 1878	328	96	13	649
Ax	C. L. Young	199,342	Jan. 15, 1878	645	188	13	116
Ax-blanks, Roll for making	W. Acheson	199,393	Jan. 22, 1878	708	209	13	134
Ax-handle attachment	G. P. Morrill	210,703	Dec. 10, 1878	346	95	14	877
Axes, Machine for making	C. L. Jeffords	200,616	Feb. 26, 1878	761	{ 223 224 }	13	374
Axle:							
See Car-ale.	Wagon-axle.						
Vehicle-axle.							
Axle-adjuster	J. Poirier	203,768	May 14, 1878	571	160	13	904
Axle-arm for vehicle-wheels	R. H. Avery	205,031	June 18, 1878	653	192	13	1106
Axle bearing, Car	A. E. Stratton	210,475	Dec. 3, 1878	89	22	14	135
Axle box, Car	J. Blakeley	199,613	Jan. 29, 1878	954	278	13	181
Axle box, Car	R. Brewer	210,490	Dec. 3, 1878	101	26	14	137
Axle box, Car	R. C. Brown	209,546	Nov. 5, 1878	8	3	14	682
Axle box, Car	W. H. and F. C. Burden	200,893	Mar. 5, 1878	76	26, 27	13	427
Axle box, Car	R. B. Eason	201,393	Mar. 19, 1878	603	185	13	517
Axle box, Car	A. A. Freeman	200,385	Feb. 10, 1878	517	153	13	328
Axle box, Car	C. B. Harris	206,564	July 30, 1878	1261	363	14	184
Axle box, Car	A. A. Hopkins	203,150	Apr. 30, 1878	1396	408	13	805
Axle box, Car	A. Onslow	206,603	July 30, 1878	1304	375	14	189
Axle box, Car	I. H. Randall	201,944	Apr. 2, 1878	82	23	13	611
Axle box, Car	J. N. Smith	208,993	Oct. 15, 1878	588	{ 171 172 }	14	579
Axle box, Car	M. B. Stafford	205,768	July 9, 1878	342	99	14	56
Axle box, Car	I. R. Titus	201,851	Mar. 26, 1878	1078	328	13	529
Axle box, Car	J. A. P. Vanclean	201,469	Mar. 19, 1878	678	207	13	528
Axle box, Car	J. E. Wheeler	204,641	June 4, 1878	216	60	13	1043
Axle box, Car	G. Williams	199,132	Jan. 8, 1878	424	124	13	81
Axle box, Carriage	J. F. Johnson	201,791	Mar. 26, 1878	1018	311	13	581
Axle-box lid, Car	J. Conner	200,854	Mar. 5, 1878	40	15	13	421
Axle-box lid, Car	T. Hibbert	201,671	Mar. 26, 1878	898	274	13	563
Axle-box lid, Car	J. E. Meth and W. Lindeman	200,375	Feb. 12, 1878	448	132	13	309
Axle-box lid, Car	R. Wells	209,150	Oct. 22, 1878	785	228	14	610
Axle-box slide, Car	G. Williams	204,178	May 28, 1878	1038	295	13	975
Axle box, Vehicle	A. F. Cooper	209,281	Oct. 29, 1878	1026	298	14	646
Axle box, Vehicle	J. Edson	200,903	Mar. 5, 1878	86	29, 30	13	428
Axle box, Vehicle	H. L. Isham	206,114	July 16, 1878	724	209	14	109
Axle-boxes, Die for making	G. A. Morse	201,935	Apr. 2, 1878	75	21	13	610
Axle boxes, Gasket for car	G. S. Winslow	199,390	Jan. 22, 1878	705	206	13	134
Axle boxes, Guard for car	J. Parker	208,331	Sept. 24, 1878	822	241	14	466
Axle brace, Vehicle	W. H. Schenck	209,522	Oct. 29, 1878	1174	341	14	668
Axle coupling, Car	C. M. Kimball	198,747	Jan. 1, 1878	18	4	13	11
Axle-lubricator	F. W. Carpenter	200,985	Mar. 5, 1878	160	52	13	440
Axle-lubricator	E. W. Moyer	201,193	Mar. 12, 1878	374	116	13	478
Axle lubricator, Car	T. Haynes	208,091	Sept. 17, 1878	549	164	14	428
Axle lubricator, Vehicle	A. Beausoleil	205,233	June 25, 1878	876	250	13	1140
Axle lubricator, Vehicle	W. J. Drew	207,493	Aug. 27, 1878	895	263	14	320
Axle lubricator, Vehicle	L. Espenschied	203,821	May 21, 1878	640	180	13	970
Axle lubricator, Vehicle	L. H. Hinaman	201,673	Mar. 26, 1878	899	275	13	563
Axle lubricator, Vehicle	L. Llewellyn	207,361	Aug. 27, 1878	756	225	14	314
Axle lubricator, Vehicle	R. R. Moore	207,195	Aug. 20, 1878	571	171	14	284
Axle lubricator, Vehicle	H. Pattengill	205,899	July 9, 1878	484	138	14	74
Axle lubricator, Vehicle	E. Wayland and L. M. Berry	207,920	Sept. 10, 1878	364	111	14	398
Axle-nut, Adjustable	O. B. Thompson	204,399	May 28, 1878	1236	361	13	1003
Axle nut, Vehicle	I. B. Boyce	208,697	Oct. 8, 1878	226	65	14	57
Axle-nut wrench	J. S. Gifford	206,721	Aug. 6, 1878	65	21	14	275
Axle-nut wrench	A. Van Wie	207,087	Aug. 13, 1878	443	137	14	274
Axle-skein	G. Schreyer	205,689	July 2, 1878	241	72	14	39
Axle skein, Vehicle	C. Gestring and J. S. Fullerton	209,248	Oct. 22, 1878	878	255	14	623

## Alphabetical list of inventions—Continued.

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Axle skein, Vehicle	C. A. Poland	207, 677	Sept. 3, 1878	04	28	14	361
Axle skein, Vehicle	F. R. Jr., and W. W. Willson	208, 131	Sept. 17, 1878	506	177	14	434
Axle skein, Vehicle	L. A. Winchester	209, 690	Oct. 15, 1878	710	206	14	595
Axle skeins, Tie-rod for vehicle	J. W. Lowell	201, 258	Mar. 12, 1878	445	137	13	488
Axle sleeve, Wagon	J. Dickens	200, 519	Feb. 19, 1878	643	190	13	348
Axle-tree washer	G. Aspinwall and F. C. Clark	204, 760	June 11, 1878	284	88	13	1050
Axle-trees, Spindle attachment for vehicle	R. H. Arnold	210, 742	Dec. 10, 1878	389	106	14	882
Axles, Preventing the loss of nuts from	I. B. Boyce	208, 669	Oct. 8, 1878	228	65	14	527
Axles, Sand-band for vehicle	A. Keiser	207, 424	Aug. 27, 1878	821	243	14	322
Axles, Sand-guard for carriage	M. C. Nay	204, 164	May 28, 1878	1025	291	13	973
Aximuths, Device for taking	W. Thomson	210, 068	Nov. 19, 1878	589	176	14	767
B.							
Baby jumper and carriage combined	M. P. Gillen	200, 652	Feb. 26, 1878	801	236	13	380
Baby-walker	J. H. Headler	202, 724	Apr. 23, 1878	948	271	13	743
Baby-walker	L. Want	207, 698	Sept. 3, 1878	112	34	14	363
Back and shoulder braces	J. W. Partridge	199, 463	Jan. 22, 1878	772	226	13	145
Back-band hook	H. W. Minnemeyer	204, 910	June 18, 1878	533	156	13	1090
Bag:							
See Feed-bag.	Paper bag.						
Mail-bag.	Saddle-bag.						
Money-bag.	Travelling-bag.						
Bag	J. Arkell	208, 138	Sept. 17, 1878	604	179	14	435
Bag	H. Reilly	201, 631	Mar. 26, 1878	863	263	13	557
Bag and sack	J. Arkell	207, 933	Sept. 10, 1878	373	114	14	400
Bag-fastener	E. W. Cox	200, 293	Oct. 22, 1878	865	251	14	631
Bag-fastener	J. C. Theakston and H. G. Fouts	207, 996	Sept. 10, 1878	443	133	14	468
Bag-fastener and tag-holder	D. McKenzie, jr.	203, 281	Oct. 22, 1878	911	266	14	627
Bag-fastening apparatus	B. X. Blair	201, 737	Mar. 26, 1878	963	294	13	573
Bag-framing machine	R. W. Chapman	207, 714	Sept. 3, 1878	131	40	14	366
Bag-holder	W. B. Allen	200, 915	Aug. 13, 1878	283	85	14	245
Bag-holder	D. Arndt	210, 831	Dec. 17, 1878	488	137	14	905
Bag-holder	J. B. Brown	209, 749	Nov. 12, 1878	243	72	14	717
Bag-holder	A. Brubaker	199, 597	Jan. 22, 1878	819	239	13	152
Bag-holder	E. Cartier	206, 537	July 30, 1878	1232	354	14	180
Bag-holder	J. L. Conway	203, 891	May 21, 1878	708	202	13	929
Bag-holder	J. S. Covert, M. D. Garner, and L. B. Walthall	201, 633	Mar. 26, 1878	834	269	13	560
Bag-holder	S. M. Dalzell	209, 663	Nov. 5, 1878	140	41	14	700
Bag-holder	W. H. Dungan	200, 857	Mar. 5, 1878	43	15	13	421
Bag-holder	J. L. Friedriech	207, 412	Aug. 27, 1878	803	239	14	320
Bag-holder	A. L. Hatfield	199, 705	Jan. 29, 1878	1049	306	13	195
Bag-holder	S. Robbins	206, 137	July 10, 1878	750	215	14	112
Bag-holder and truck combined	E. G. Frisbie and C. H. Johnson	199, 051	Jan. 8, 1878	338	90	13	68
Bag-lock	R. Flocke	200, 994	Mar. 5, 1878	87	30	13	428
Bag-lock	A. Oberndorfer	201, 552	Mar. 19, 1878	765	233	13	540
Bag-machine	G. O. Lackey	201, 425	Mar. 19, 1878	630	191	13	522
Bag tag and fastener	H. Anderson	210, 001	Nov. 19, 1878	520	156	14	758
Bag tag and fastener	W. G. Smoot	203, 381	May 7, 1878	152	44	13	841
Bag-tie and address-holder	J. A. Burchard	210, 004	Nov. 19, 1878	525	158	14	758
Baggage-check	W. S. Guy	207, 932	Sept. 10, 1878	408	123	14	404
Baggage-check	W. H. Johnson	200, 244	July 23, 1878	888	253	14	133
Baggage furnace	W. Littlejohn	208, 476	Oct. 1, 1878	23	67	14	492
Bail and ear	W. M. Dallman	206, 513	July 30, 1878	1236	356	14	181
Bail-ear for buckets and pails	G. C. Napheys	211, 036	Dec. 17, 1878	746	204	14	935
Bails, Machine for making pail	L. Williams	209, 938	Nov. 19, 1878	514	156	14	757
Bake-pan	L. G. Fisher, jr.	209, 099	July 16, 1878	792	202	14	106
Bake-pan	C. Jackson	204, 975	June 18, 1878	599	175	13	1098
Baker and cooker, Steam	J. A. McClure	204, 353	May 28, 1878	1220	348	13	998
Baker and roaster	S. W. White	205, 224	June 25, 1878	865	256	13	1128
Baker, Clam	J. L. Stroub	199, 595	Jan. 22, 1878	910	267	13	106
Baking-pan and cover	B. F. Henry	208, 173	Sept. 17, 1878	645	189	14	410
Baking-powder	W. P. Clotworthy	206, 930	Aug. 13, 1878	296	88	14	246
Balance and load weight	C. R. Tuttle	209, 434	Oct. 29, 1878	1080	314	14	655
Balance, Compensation	C. V. Woerd	203, 970	May 21, 1878	801	230	13	941
Balance-band tightener	J. R. Blossom	206, 070	July 16, 1878	679	197	14	104
Balance-band tightener	G. Bull and L. Koch	199, 617	Jan. 29, 1878	962	279	13	182
Balance-band tightener	W. S. E. Sevey and P. C. Manz	201, 361	Mar. 19, 1878	573	176	13	513
Balance-band tightener	J. L. Sheppard	209, 363	Oct. 29, 1878	1090	293	14	644
Balance-band tightener and band	J. L. Sheppard	207, 902	Sept. 10, 1878	344	104	14	306
Balance-band, Wire	L. T. Newell	202, 954	Apr. 30, 1878	1204	348	13	779
Balance-tie	W. G. Anderson	207, 703	Sept. 3, 1878	121	37	14	364
Balance-tie	T. A. Andrews and A. G. Edwards	199, 678	Jan. 29, 1878	1023	298	13	191
Balance-tie	L. Arnold	204, 183	May 28, 1878	1051	298	13	976
Balance-tie	A. Barba in	210, 288	Nov. 26, 1878	838	247	14	803
Balance-tie	C. Batte	203, 401	May 7, 1878	172	50	13	844
Balance-tie	G. N. Beard	204, 525	June 4, 1878	97	33	13	1023
Balance-tie	J. Y. Bloomingdale	207, 486	Aug. 27, 1878	888	261	13	330
Balance-tie	J. R. Blossom	200, 428	Feb. 19, 1878	559	165	13	335
Balance-tie	J. R. Blossom	205, 720	July 9, 1878	292	86	14	49
Balance-tie	J. D. Bruce	205, 833	July 9, 1878	416	113	14	65
Balance-tie	S. J. Chapman	199, 788	Jan. 29, 1878	1127	331	13	298
Balance-tie	C. H. Chase	202, 989	Apr. 30, 1878	1236	357	13	734
Balance-tie	G. C. Clarke	209, 938	Nov. 19, 1878	471	142	11	751
Balance-tie	F. Cook	200, 644	Feb. 26, 1878	791	233	13	378
Balance-tie	F. Cook and H. Shaw	200, 700	Feb. 23, 1878	851	251	13	347
Balance-tie	F. Cook	201, 751	Mar. 26, 1878	975	298	13	575



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Bale-tie	J. M. Cutliff	203,599	May 14, 1878	397	112	13	883
Bale-tie	W. S. Davis	202,242	Apr. 9, 1878	409	119	13	661
Bale-tie	C. Ewing	203,255	May 7, 1878	19	7	13	823
Bale-tie	S. H. Gilman	198,976	Jan. 8, 1878	267	77	13	57
Bale-tie	S. H. Gilman	204,965	June 18, 1878	590	172	13	1097
Bale-tie	It. H. Goldsmith	201,603	Mar. 5, 1878	182	58	13	443
Bale-tie	L. W. P. Gray and T. S. Johnson	202,719	Apr. 23, 1878	945	270	13	742
Bale-tie	D. Hall	203,444	May 7, 1878	223	63	13	851
Bale-tie	J. C. Harper	207,273	Aug. 20, 1878	654	194	14	286
Bale-tie	W. H. Howard	202,431	Apr. 2, 1878	170	49	13	622
Bale-tie	A. Jüngels	204,737	June 11, 1878	326	99	13	1061
Bale-tie	I. A. Kilmer	201,019	Mar. 5, 1878	198	63	13	445
Bale-tie	A. E. Kimberly	200,639	Feb. 26, 1878	810	238	13	381
Bale-tie	J. Knipscheer	202,552	Apr. 16, 1878	755	218	13	711
Bale-tie	W. R. Lenard	109,725	Jan. 29, 1878	1066	312	13	198
Bale-tie	C. Lester	207,749	Sept. 3, 1878	169	51	14	270
Bale-tie	F. M. Logue	201,431	Mar. 19, 1878	643	196	13	523
Bale-tie	F. M. Logue	205,882	July 9, 1878	465	132	14	71
Bale-tie	W. Loyd	204,588	June 4, 1878	160	52	13	1035
Bale-tie	W. S. McKinney	203,661	Apr. 30, 1878	1303	378	13	798
Bale-tie	T. R. Porter	209,358	Oct. 29, 1878	1002	291	14	643
Bale-tie	J. C. Riethmüller	200,764	Feb. 26, 1878	914	265	13	306
Bale-tie	A. Roebler	207,071	Aug. 13, 1878	428	133	14	263
Bale-tie	J. W. Roop	202,603	Apr. 30, 1878	1213	351	13	781
Bale-tie	W. B. Rutherford and J. T. Hawkins	204,764	June 11, 1878	354	106	13	1064
Bale-tie	H. Shaw and F. Cook	200,672	Feb. 23, 1878	821	242	13	383
Bale-tie	W. Silvester	210,970	Dec. 17, 1878	662	182	14	925
Bale-tie	M. C. Smith	205,918	July 9, 1878	565	143	14	70
Bale-tie	M. C. Smith	200,333	July 23, 1878	1030	295	14	151
Bale-tie	H. S. Worthington	205,023	June 18, 1878	644	199	13	1104
Bale-tie	J. Wynkoop and J. Y. Bloomingdale	204,409	May 28, 1878	1277	334	13	1005
Bale-tie and apparatus for applying the same	N. W. Speers	200,775	Feb. 20, 1878	925	372	13	398
Bale-tie buckle	J. L. Sheppard	207,901	Sept. 10, 1878	343	104	14	395
Bale-tie hooks, Machine for forming	P. L. Van Derzee	202,491	Apr. 16, 1878	672	197	13	702
Bale-tie, Wire	R. H. Bartlett	207,097	Aug. 29, 1878	477	143	14	275
Bale-tie, Wire	W. E. Borst	200,371	Feb. 19, 1878	505	149	13	317
Bale-tie, Wire	J. M. Pollard	210,629	Dec. 10, 1878	273	74	14	838
Bale-ties, Punch and die for making	J. C. Riethmüller	209,422	Oct. 29, 1878	1065	309	14	652
Bale-tying machine	F. S. Heath	200,059	Feb. 5, 1878	168	55	13	259
Baling cut hay	J. C. Kamp and C. Brown	206,797	Aug. 6, 1878	146	45	14	224
Baling-press	V. and F. Becker	210,901	Dec. 17, 1878	585	161	14	916
Baling-press	W. C. Bibb, sr.	210,399	Dec. 3, 1878	8	2	14	826
Baling-press	J. R. Blossom	203,880	May 21, 1878	690	199	13	927
Baling-press	J. R. Blossom	206,653	Aug. 6, 1878	1	1	14	207
Baling-press	W. H. Burgess	199,509	Jan. 22, 1878	829	240	13	152
Baling-press	H. D. Coleman	205,056	June 18, 1878	677	199	13	1119
Baling-press	P. K. Dederick	205,734	July 9, 1878	307	90	14	51
Baling-press	P. K. Dederick	205,735	July 9, 1878	307	90	14	51
Baling-press	P. K. Dederick	205,736	July 9, 1878	309	90	14	51
Baling-press	P. K. Dederick	205,737	July 9, 1878	310	91	14	53
Baling-press	P. K. Dederick	206,865	Aug. 13, 1878	329	73	14	239
Baling-press	Z. Phillips	207,893	Sept. 17, 1878	579	173	14	431
Baling-press	W. D. Riddick	207,893	Sept. 17, 1878	338	102	14	295
Baling-press	R. S. Squires and F. Kaiser	210,721	Dec. 10, 1878	368	101	14	889
Baling-press	J. H. Simonson	203,082	Apr. 30, 1878	1326	885	13	796
Baling-press	J. M. Toland	205,753	Aug. 6, 1878	95	31	14	219
Baling-press follower	E. M. Ivens	202,110	Apr. 9, 1878	269	79	13	643
Ball-joint	W. Ellinger	205,333	July 30, 1878	1081	309	14	103
Ball-trap	J. L. Schroder	201,952	Apr. 2, 1878	87	25	13	612
Balls, Apparatus for the manufacture of seamless	J. Brant	207,158	Aug. 2, 1878	539	159	14	280
Balloon	W. F. Pearson	202,750	Apr. 23, 1878	979	281	13	747
Balloon	J. Tracey	205,319	June 25, 1878	967	280	13	1151
Ballot-box	S. T. Bacon	203,525	May 11, 1878	320	91	13	673
Ballot-box	W. L. Barnes	208,951	Oct. 15, 1878	549	169	14	573
Ballot-box	M. D. Williams	200,495	Feb. 19, 1878	622	183	13	315
Ballot-box, Registering	A. B. Roney	211,056	Dec. 17, 1878	770	211	14	538
Band cutter, Wire	H. Curtis	210,190	Nov. 20, 1878	736	218	14	799
Band cutter, Wire	R. Hale	201,003	Mar. 5, 1878	184	59	13	443
Band cutter, Wire	W. E. Snediker	203,046	Sept. 17, 1878	511	152	14	422
Band-cutting fork	J. Lockhart and G. W. Albin	209,487	Oct. 29, 1878	1132	331	14	663
Bands, cords, or ropes, Machine for manufacturing	L. Binns	209,106	Oct. 22, 1878	734	212	14	693
Banjo	H. C. Dobson	200,900	Mar. 5, 1878	82	29	13	428
Banjo	C. E. Dobson	203,604	May 14, 1878	401	114	13	883
Bar:							
See Car-coupling bar.	Horseshoe-cutter bar.						
Car-draw-bar.	Jail-bar.						
Fender-bar.	Metal bar.						
Furnace-grate bar.	Mosquito-bar.						
Grate bar.	Railway-switch bar.						
Harvester-cutter bar.	Sewing-machine-needle bar.						
Hitching-bar.							
Barb-winder	B. F. Sellers	207,449	Aug. 27, 1878	849	251	14	325
Barber and dental chair	G. W. Archer	203,933	May 21, 1878	867	252	13	942
Barber's appliance	J. P. Molitor	205,495	July 2, 1878	32	10, 11	14	13
Barber's chair	E. Berninghaus	207,039	Aug. 20, 1878	478	143	14	271
Barber's chair	J. Clough	210,599	Dec. 3, 1878	113	29	14	818
Barber's chair	J. W. Coffey	207,593	Sept. 3, 1878	9	4	14	379
Barber's chair	H. Geise	201,176	Mar. 12, 1878	357	110	13	475
Barber's chair	A. Weckerle	205,452	June 25, 1878	1100	326	13	1169
Barber's comb	J. M. Wolridge	207,790	Sept. 3, 1878	209	64	14	575

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Barber's comb	T. E. Gravatt	201,773	Mar. 26, 1878	1003	306	13	578
Bark, Cutter for reducing	W. E. Nickerson	201,938	Apr. 2, 1878	77	22	13	610
Bark-cutting machine	S. R. Thompson	200,361	Feb. 12, 1878	482	142	13	315
Bark-grinding mill	R. H. Shultis	206,494	July 30, 1878	1198	342	14	175
Bark-reducing machine	W. Chicken	210,095	Nov. 19, 1878	619	184	14	771
Barley and malt drier	G. S. Reuter	208,849	Oct. 8, 1878	428	124	14	553
Barometer	R. M. Lowne	200,739	Feb. 26, 1878	892	262	13	393
Barrel	H. M. Fitzbush	201,603	Mar. 26, 1878	836	254	13	553
Barrel	L. L. Hansen	203,824	May 21, 1878	643	181	13	920
Barrel	J. D. McEachren	200,468	Feb. 19, 1878	597	176	13	341
Barrel and box, Moth-proof	M. L. Thompson	204,263	May 28, 1878	1128	322	13	986
Barrel, Combination	T. C. Veale	207,917	Sept. 10, 1878	359	109	14	397
Barrel-cover	E. B. Comly and W. C. Brown	208,570	Oct. 1, 1878	120	34	14	505
Barrel-cover	W. B. Hartley and P. P. Little	207,517	Aug. 27, 1878	921	271	14	334
Barrel-cover	A. McDougall	203,059	Apr. 30, 1878	1301	378	13	792
Barrel-cover	S. W. Sheldon	207,214	Aug. 20, 1878	590	177	14	287
Barrel-filler	J. S. Carmalee	208,332	Sept. 24, 1878	823	241	14	466
Barrel-filling device	T. W. Moran	201,887	Apr. 2, 1878	28	8	13	603
Barrel for packing fruit	A. Burckard	203,115	Apr. 30, 1878	1356	395	13	800
Barrel-head	H. Schwarzwaldner	210,882	Dec. 17, 1878	553	155	14	913
Barrel-head machine	C. Stout	207,455	Aug. 27, 1878	855	252	14	326
Barrel heads and covers, Device for fastening	W. I. Winne	205,226	June 25, 1878	867	256	13	1139
Barrel-heads, Machine for making	A. Wason	209,311	Oct. 22, 1878	940	274	14	631
Barrel-hoop stretcher	D. Stallard, jr	210,815	Dec. 10, 1878	465	130	14	893
Barrel, Knock-down	L. Passoo	204,600	June 4, 1878	173	56	13	1037
Barrel-lining composition	A. Van Bibber	204,515	June 4, 1878	87	30	13	1025
Barrel-covering machine	J. D. McEachren	209,349	Oct. 29, 1878	993	289	14	641
Barrel-making machine	C. W. Thompson	205,923	July 9, 1878	510	145	14	77
Barrel or keg	W. H. Ewing	209,163	Oct. 22, 1878	797	231	14	611
Barrel, Tumbling	J. C. Cooley and T. T. Graham	199,797	Jan. 29, 1878	1136	333	13	209
Barrel, Tumbling	L. Crooke	203,595	May 14, 1878	395	111	13	882
Barrel-trussing machine	H. W. King	200,733	Feb. 26, 1878	887	260	13	392
Barrel-trussing machine	R. H. Tyson	207,461	Aug. 27, 1878	861	254	14	326
Barrel-washer	H. Binder	204,258	May 28, 1878	1152	329	13	989
Barrel, Wood-incased	A. W. Blye	199,405	Jan. 22, 1878	718	212	13	136
Barrels, casks, &c., beneath counters, Swinging	J. A. Westlake	209,949	Nov. 12, 1878	447	136	14	745
Barrels, &c., Compound for lining	M. Laffin	202,834	Apr. 23, 1878	1070	261	13	758
Barrels, Cooling attachment for	J. Hoer	209,262	Oct. 22, 1878	891	260	14	625
Barrels, Drip-basin for	E. R. Pfeueger	207,459	Aug. 27, 1878	835	247	14	323
Barrels, Faucet-hole attachment for	E. T. Murphy	203,638	May 14, 1878	430	124	13	887
Barrels, kegs, &c., Valve for	J. Byrne	202,629	Apr. 23, 1878	849	245	13	732
Barrels, Machine for goring veneers for	C. W. Thompson	203,509	May 7, 1878	283	81	13	859
Barrels, Machine for making wooden	J. Kisor	205,875	July 9, 1878	458	130	14	70
Basin and urinal, Swinging	J. Reid	202,193	Apr. 9, 1878	359	105	13	653
Basin, Catch	B. Kottmann	208,827	Oct. 8, 1878	398	114	14	549
Basin cover, Catch	G. G. Campbell	204,882	June 18, 1878	566	148	13	1086
Basin-trap	W. Vanderman	207,632	Sept. 3, 1878	47	15	14	355
Basin-valve	T. Hennessy and M. H. Dorgan	205,549	July 2, 1878	89	25	14	20
Basin valve, Wash	J. S. Gilbert	201,405	Mar. 19, 1878	621	189	13	519
Basins, Overflow and trap for	C. H. Moore	207,197	Aug. 20, 1878	574	172	14	285
Basins, &c., Valve attachment for the pipes of wash	F. E. Kernochan	203,347	May 7, 1878	115	33	13	836
Basket	I. I. Cole	205,355	June 25, 1878	1006	298	13	1157
Basket, Flower	F. C. Tenmyson	207,083	Aug. 13, 1878	440	136	14	264
Basket-splints, Machine for cutting	A. I. Hogan	209,396	Oct. 29, 1878	1038	302	14	648
Basket-splints, Machine for making	D. Wickersham and T. B. Brown	206,285	July 23, 1878	938	265	14	140
Basket, Wire	N. Davis	205,060	June 18, 1878	682	200	13	1109
Baskets, Manufacture of waste-paper	W. F. Hatfield	209,168	Oct. 22, 1878	804	233	14	612
Bath:							
See Deep water safety-bath.	Hot atmosphere and medi-						
Hot bath.	Shower-bath.						
	Vapor-bath.						
Bath	J. Ketzschner	202,270	Apr. 9, 1878	436	127	13	664
Bath attachment	O. Kuessner and F. Avril	205,490	July 2, 1878	27	9	14	12
Bath-tub, basin, sink, water-closet, &c	J. H. Kinsman	210,334	Nov. 26, 1878	887	261	14	810
Bathing-house, Portable	N. Overfield	202,748	Apr. 23, 1878	976	280	13	746
Battery:							
See Counterpoise battery. Galvanic battery.							
Battery-carbons, Connector for	A. C. Kreis	210,460	Dec. 3, 1878	74	19	14	834
Battery-cells, Cap for	W. Boeckel	203,405	May 7, 1878	175	51	13	844
Batting, Machine for folding cotton	H. A. Stearns	202,480	Apr. 16, 1878	662	194	13	701
Batting, Machine for making cotton	J. L. Norton	201,940	Apr. 2, 1878	78	22	13	610
Batting or wadding and machine for folding the same, Cotton.	H. A. Stearns	206,841	Aug. 6, 1878	189	60	14	230
Batting or wadding, Device for folding cotton	W. Lewis	204,058	May 21, 1878	888	255	13	952
Bed and chair, Camp	A. M. Eastman	203,605	May 14, 1878	401	114	13	883
Bed and fire-escape, Spring	J. G. Rahner	199,861	Jan. 29, 1878	1192	350	13	217
Bed and life-raft, Combined	G. M. White	201,728	Mar. 26, 1878	954	292	13	571
Bed-bottom	B. F. Allen	205,332	June 25, 1878	983	291	13	1154
Bed-bottom	I. S. Bunnell	210,989	Dec. 17, 1878	683	188	14	928
Bed-bottom	H. S. Cate	202,149	Apr. 9, 1878	309	92	13	647
Bed-bottom	H. S. Cate	208,294	Sept. 24, 1878	786	229	14	460
Bed-bottom	C. J. Clements	210,752	Dec. 10, 1878	400	109	14	884
Bed-bottom	G. S. Clements and J. C. Decker	201,750	Mar. 26, 1878	974	298	13	575
Bed-bottom	F. C. Eastman	207,800	Sept. 10, 1878	231	72, 73	14	381
Bed-bottom	H. D. Fitch	203,023	Apr. 30, 1878	1272	368	13	788
Bed-bottom	N. T. Hamilton	208,591	Oct. 1, 1878	138	40	14	507
Bed-bottom	T. and O. Howe	204,222	May 28, 1878	1089	310	13	981
Bed-bottom	L. Hull	202,032	Apr. 2, 1878	170	49	13	623
Bed-bottom	E. A. Jeffery	200,397	Feb. 19, 1878	528	156	13	330
Bed-bottom	T. R. Jones	209,124	Oct. 22, 1878	758	220	14	606
Bed-bottom	J. T. Kennedy	205,871	July 9, 1878	454	129	14	70
Bed-bottom	J. Magers	198,892	Jan. 1, 1878	173	49	13	36
Bed-bottom	W. W. Maughlin	207,758	Sept. 3, 1878	178	54	14	371

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Bed-bottom.....	E. W. Maxson.....	206,256	July 23, 1878	901	257	14	135
Bed-bottom.....	F. W. Mitchell.....	208,917	Oct. 15, 1878	509	148	14	568
Bed-bottom.....	D. D. Osborne.....	199,096	Jan. 8, 1878	382	113	13	76
Bed-bottom.....	H. W. Rubel.....	202,053	Apr. 2, 1878	192	56	13	626
Bed-bottom.....	M. Stansel.....	204,104	May 21, 1878	939	268	13	958
Bed-bottom.....	D. Swartz.....	210,368	Nov. 20, 1878	929	270	14	815
Bed-bottom.....	T. and J. N. Tracy.....	202,302	Apr. 9, 1878	468	137	13	609
Bed-bottom.....	G. S. Walker.....	204,401	May 28, 1878	1268	361	13	1004
Bed-bottom.....	W. M. Willoughby.....	210,980	Dec. 17, 1878	673	185	14	927
Bed-bottom and fire-escape, Combined.....	W. U. Hoover.....	201,015	Mar. 5, 1878	194	62	13	445
Bed-bottom, Spring.....	M. R. Davis.....	208,077	Sept. 17, 1878	537	190	14	426
Bed-bottom, Spring.....	C. Eade.....	210,508	Dec. 3, 1878	123	33	14	840
Bed-bottom, Spring.....	A. S. Felch.....	207,959	Sept. 10, 1878	405	122	14	403
Bed-bottom, Spring.....	D. Haire.....	209,676	Nov. 5, 1878	155	45	14	701
Bed-bottom, Spring.....	J. Hermann.....	206,731	Aug. 6, 1878	75	24	14	216
Bed-bottom, Spring.....	E. J. Johnson and M. E. Mills.....	206,735	Aug. 6, 1878	79	25	14	217
Bed-bottom, Spring.....	J. Oothoudt.....	206,817	Aug. 6, 1878	161	51	14	227
Bed-bottom, Spring.....	T. J. Pettit.....	210,145	Nov. 19, 1878	672	200	14	778
Bed-bottom, Spring.....	H. Pitcher.....	208,987	Oct. 15, 1878	583	170	14	578
Bed-bottom, Spring.....	H. Tucker.....	208,867	Oct. 8, 1878	446	129	14	556
Bed-bottom, Spring.....	J. W. Valley.....	207,462	Aug. 27, 1878	862	254	14	326
Bed-bottom, Spring.....	E. Yeoman.....	210,000	Nov. 19, 1878	519	156	14	757
Bed-bottom, Spring.....	M. Van Sickle.....	207,833	Sept. 10, 1878	265	82	14	386
Bed-bottoms, Covering for spring.....	N. Dutton.....	199,147	Jan. 15, 1878	455	134	13	86
Bed, Camp.....	F. J. De Morambert.....	207,060	Aug. 13, 1878	418	129	14	261
Bed, Camp.....	T. W. B. Murray and C. J. Baker.....	210,550	Dec. 3, 1878	173	46	14	846
Bed, Camp.....	W. G. Richardson.....	210,148	Nov. 19, 1878	674	200	14	779
Bed, Camp.....	M. A. Stevens.....	201,463	Mar. 19, 1878	672	205	13	527
Bed, Camp.....	O. A. White.....	202,685	Apr. 23, 1878	912	261	13	738
Bed-canopy.....	R. Shepherd.....	207,556	Aug. 27, 1878	964	283	14	339
Bed-clothes clamp.....	C. M. Bryson.....	209,025	Feb. 5, 1878	130	42	13	254
Bed-lounge.....	H. S. Carter.....	209,019	Oct. 15, 1878	622	180	14	583
Bed-lounge.....	H. Richter.....	200,845	Mar. 5, 1878	32	11	13	420
Bed-slat coupler.....	L. J. A. Roswall.....	207,776	Sept. 3, 1878	195	59	14	373
Bed, Sofa.....	A. Hansen.....	202,108	Apr. 9, 1878	266	78, 79	13	641
Bed, Sofa.....	S. Squires.....	206,980	Aug. 13, 1878	341	105	14	252
Bed-spring.....	E. C. Barmore.....	198,833	Jan. 1, 1878	110	32	13	26
Bed, Spring.....	A. J. Lattin.....	208,979	Oct. 15, 1878	577	168	14	577
Bed-spring.....	L. Wildernuth.....	210,479	Dec. 3, 1878	91	23	14	836
Bedstead and fire-escape, Combined.....	H. B. Scholes.....	207,899	Sept. 10, 1878	341	103	14	395
Bedstead, Cabinet.....	J. G. and J. W. Knapp.....	200,401	Feb. 19, 1878	532	157	13	331
Bedstead, Camp.....	R. A. Bradley.....	198,869	Jan. 1, 1878	150	43	13	32
Bedstead-fastening.....	S. D. Butler.....	198,836	Jan. 1, 1878	113	32	13	26
Bedstead-fastening.....	L. P. Clark.....	209,022	Oct. 15, 1878	626	181	14	583
Bedstead-fastening.....	F. S. Clarkson.....	207,949	Sept. 10, 1878	393	119	14	402
Bedstead-fastening.....	C. H. Goebel.....	201,343	Mar. 19, 1878	554	170	13	510
Bedstead-fastening.....	T. J. House.....	210,123	Nov. 19, 1878	648	192	14	775
Bedstead-fastening, Metallic.....	L. Hull.....	200,198	Feb. 12, 1878	315	94	13	290
Bedstead, Folding.....	S. Bender.....	206,765	Aug. 6, 1878	109	35	14	220
Bedstead, Folding and extension.....	J. T. Hatfield.....	210,606	Dec. 10, 1878	247	68	14	865
Bedstead-guard.....	F. Diescher.....	208,721	Oct. 8, 1878	283	81	14	534
Bedstead, Invalid.....	F. Doll, M. Rieder, and J. G. Diehlmann.....	202,936	Apr. 30, 1878	1186	342	13	777
Bedstead, Invalid.....	M. Gillespie.....	202,343	Apr. 16, 1878	531	155	13	682
Bedstead, Invalid.....	A. J. Goodwin.....	202,106	Apr. 9, 1878	264	78	13	641
Bedstead, Invalid.....	J. Goodwin.....	204,026	May 21, 1878	859	246	13	948
Bedstead, Invalid.....	A. Iske.....	206,865	Mar. 5, 1878	51	18	13	422
Bedstead, Invalid.....	G. Iveson.....	210,126	Nov. 19, 1878	651	193	14	775
Bedstead, Invalid.....	J. Kaylor.....	200,543	Feb. 19, 1878	668	197	13	352
Bedstead, Invalid.....	J. W. Lovins and H. Gibson.....	205,659	July 2, 1878	205	61	14	35
Bedstead, Sofa.....	H. J. Grinane.....	203,141	Apr. 30, 1878	1384	402	13	893
Bedstead, Sofa.....	A. Hentshel.....	201,246	Mar. 12, 1878	432	133	13	486
Bedstead, Sofa.....	W. J. Myers.....	203,289	May 7, 1878	59	18	13	828
Bedstead, Table.....	A. A. Hoffman.....	202,823	Apr. 23, 1878	1059	303	13	757
Bedstead, Table.....	E. Kiss.....	201,795	Mar. 26, 1878	1022	312	13	581
Bedstead, Wardrobe.....	H. P. Blackman.....	209,604	Nov. 5, 1878	72	21	14	690
Bedstead, Wardrobe.....	W. Fay.....	201,337	Mar. 19, 1878	548	168	13	509
Bedstead, Wardrobe.....	H. S. Hale.....	210,777	Dec. 10, 1878	425	118	14	888
Bedstead, Wardrobe.....	J. C. Hall.....	203,728	May 14, 1878	527	149	13	899
Bedstead, Wardrobe.....	J. C. Hand and F. Caulier.....	204,321	May 28, 1878	1187	338	13	993
Bedstead, Wardrobe.....	E. Kiss.....	204,340	May 28, 1878	1207	344	13	996
Bedstead, Wardrobe.....	J. M. Montgomery, jr.....	207,975	Sept. 10, 1878	420	126	14	405
Bedstead, Wardrobe.....	H. Ogborn.....	201,282	Mar. 12, 1878	471	144	13	492
Bedstead, Wardrobe.....	D. D. Shupe.....	210,057	Nov. 19, 1878	576	173	14	765
Bedsteads, Folding leg for sofa.....	P. Schultes and C. Walter.....	210,156	Nov. 19, 1878	683	203	14	780
Bedsteads, Folding leg for sofa.....	W. Seng.....	199,320	Jan. 15, 1878	624	181	13	113
Bedsteads, Invalid attachment for.....	T. T. Kendrick.....	204,232	May 28, 1878	1098	313	13	982
Bee-feeder.....	J. M. Shuck.....	204,767	June 11, 1878	357	107	13	1065
Bee-feeding device.....	E. Carter.....	200,506	Feb. 19, 1878	632	186	13	346
Bee-hive.....	E. Armstrong.....	210,592	Dec. 10, 1878	232	63	14	863
Bee-hive.....	N. M. Barnes.....	205,339	June 25, 1878	933	{ 293 294 }	13	1155
Bee-hive.....	B. Buzzard and A. P. Snyder.....	203,321	May 7, 1878	93	26	13	832
Bee-hive.....	M. A. and N. J. Carriker.....	199,513	Jan. 22, 1878	825	241	13	153
Bee-hive.....	O. Colvin.....	203,890	May 21, 1878	707	202	13	929
Bee-hive.....	P. G. Eaton.....	206,305	July 23, 1878	961	{ 272 273 }	14	143
Bee-hive.....	J. W. Elder.....	204,549	June 4, 1878	116	40	13	1029
Bee-hive.....	W. C. Erb.....	204,551	June 4, 1878	118	40	13	1029
Bee-hive.....	J. T. Fife.....	206,714	Aug. 6, 1878	58	18	14	214
Bee-hive.....	C. W. Gale.....	207,731	Sept. 3, 1878	150	45, 46	14	368
Bee-hive.....	C. R. Macy.....	202,114	Apr. 9, 1878	273	81	13	642
Bee-hive.....	D. P. Miller.....	202,569	Apr. 16, 1878	770	* 222	13	713
Bee-hive.....	J. E. Morgan.....	204,678	June 11, 1878	262	81	13	1053
Bee-hive.....	J. H. Moses and F. M. Stewart.....	209,622	Nov. 5, 1878	94	27	14	693

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Bee-hive.....	J. Palmer.....	200,084	Feb. 5, 1878	196	62	13	263
Bee-hive.....	J. W. Park.....	200,931	Mar. 5, 1878	109	37	13	432
Bee-hive.....	I. Parke.....	203,937	May 21, 1878	758	218	13	936
Bee-hive.....	J. F. Petty and T. J. Mobley.....	211,043	Dec. 17, 1878	758	208	14	937
Bee-hive.....	W. C. Riffe.....	208,851	Oct. 8, 1878	430	125	14	554
Bee-hive.....	W. B. Shoemaker.....	205,429	June 25, 1878	1078	319	13	1166
Bee-hive.....	J. R. Spearman.....	205,585	July 2, 1878	127	38	14	25
Bee-hive.....	R. Strawser.....	199,328	Jan. 15, 1878	632	184	13	114
Bee-hive.....	J. P. Stroope.....	200,004	Feb. 5, 1878	109	36	13	250
Bee-hive.....	D. S. Thomas.....	205,444	June 25, 1878	1093	323 324	13	1168
Bee-hive.....	D. T. Tripp.....	208,772	Oct. 8, 1878	340	97	14	541
Bee-hive.....	J. K. P. Venable.....	204,696	June 11, 1878	280	87	13	1055
Bee-hive.....	G. W. Wageoner.....	199,005	Jan. 8, 1878	296	87	13	61
Bee-hive.....	G. S. Walton.....	204,115	May 21, 1878	949	272	13	959
Bee-hive.....	J. Wash.....	201,964	Apr. 2, 1878	100	29	13	614
Bee-hive.....	A. E. Wenzel.....	202,612	Apr. 16, 1878	813	235	13	717
Bee-hive.....	P. A. Westervelt.....	206,509	July 30, 1878	1206	346	14	177
Bee-hive.....	W. K. Wilkinson.....	209,437	Oct. 29, 1878	1083	315	14	655
Bee-hive.....	J. Young.....	203,521	May 7, 1878	299	85	13	861
Bees from honey-boxes, Device for removing.....	J. Wash.....	201,965	Apr. 2, 1878	101	29	13	614
Beefsteak-tenderer.....	H. R. Fuller.....	198,974	Jan. 8, 1878	206	76	13	57
Beer, Apparatus for preserving.....	L. Gathmann.....	201,236	Mar. 12, 1878	422	130	13	485
Beer-boiler.....	A. Foubert.....	206,010	July 16, 1878	614	177	14	95
Beer-cooler.....	F. C. Deckebach.....	210,016	Nov. 19, 1878	536	161	14	760
Beer-cooler.....	W. F. Fey.....	207,264	Aug. 20, 1878	645	102	14	294
Beer-cooler.....	W. B. Frantz.....	206,941	Aug. 13, 1878	307	93	14	348
Beer-cooler.....	R. Portner.....	202,049	Apr. 2, 1878	188	55	13	625
Beer-cooler.....	H. F. Schmidt.....	204,389	May 28, 1878	1248	355	13	1001
Beer-cooler.....	W. Taylor and M. Gortz.....	205,771	July 9, 1878	346	100	14	56
Beer-cooling apparatus.....	A. Faulhaber.....	203,718	May 14, 1878	518	147	13	897
Beer, Fermenting.....	G. Bartholomæ.....	201,982	Apr. 2, 1878	119	35	13	616
Beer in kegs, Apparatus for preserving.....	W. Gaffron.....	209,244	Oct. 22, 1878	875	254	14	622
Bell, Alarm.....	C. H. Smith.....	210,574	Dec. 17, 1878	664	183	14	926
Bell-alarm, Centrifugal.....	C. W. Holtzer.....	199,828	Jan. 29, 1878	1164	342	13	213
Bell, Call.....	W. H. Nichols.....	201,041	Mar. 5, 1878	222	70	13	449
Bell, Door.....	F. W. Brocksieper.....	208,289	Sept. 24, 1878	780	228	14	460
Bell, Door.....	J. W. Snider.....	202,064	Apr. 2, 1878	203	59	13	627
Bell, Horse-car.....	J. M. Gaughen.....	202,645	Apr. 23, 1878	871	249	13	734
Bell-ringer, Steam.....	G. N. Osgood.....	203,760	May 14, 1878	561	159	13	903
Bell-ringer, Steam.....	G. N. Osgood.....	210,956	Dec. 17, 1878	644	178	14	124
Bellows.....	C. W. Dunn, sr.....	199,042	Jan. 8, 1878	329	96	13	67
Bellows.....	F. McCrory.....	199,846	Jan. 29, 1878	1181	346	13	216
Bellows-nozzle.....	T. H. Bullock.....	202,700	Apr. 23, 1878	928	265	13	740
Bellows-nozzle.....	W. E. Edwards and F. J. Gracier.....	198,932	Jan. 8, 1878	223	63	13	50
Belt-coupling.....	A. Sirois.....	207,903	Sept. 10, 1878	347	105	14	396
Belt, Endless carrying.....	T. M. Healey.....	203,825	May 21, 1878	643	181	13	920
Belt-fastener.....	S. Budlong and W. O. Talcott.....	205,610	July 2, 1878	150	45	14	28
Belt-fastener.....	W. W. Glover.....	210,518	Dec. 3, 1878	136	36	14	841
Belt-fastener.....	A. J. Johnson.....	207,038	Aug. 13, 1878	397	123	14	259
Belt-fastener.....	G. L. Zimmer.....	208,663	Oct. 1, 1878	214	61	14	517
Belt for suspending garments.....	H. A. Hayden.....	200,293	Feb. 12, 1878	410	122	13	304
Belt-hook, Fireman's.....	H. Buchholz.....	205,348	June 25, 1878	1000	296	13	1156
Belt-shipper.....	D. C. Newell.....	205,408	June 25, 1878	1057	313	13	1163
Belt-tightener.....	L. L. Croft.....	201,596	Mar. 26, 1878	828	232	13	552
Belt-tightener.....	T. Shanks.....	205,916	July 9, 1878	504	143	14	76
Belt-tightener.....	W. H. Curtiss.....	200,517	Feb. 19, 1878	641	189	13	348
Belt-tightener.....	A. Spadone.....	208,431	Sept. 24, 1878	929	272	14	479
Belt-tightener.....	A. Spadone.....	208,432	Sept. 24, 1878	930	272	14	479
Belt-tightener.....	F. H. C. Mey.....	203,475	May 7, 1878	252	73	13	855
Belt-tightener.....	F. G. Sargent.....	207,626	Sept. 3, 1878	42	13	14	354
Belt-tightener.....	T. Gingras.....	206,556	July 30, 1878	1253	360	14	183
Belt-tightener.....	J. Small.....	207,452	Aug. 27, 1878	851	251	14	325
Belt-tightener.....	L. Starck.....	198,800	Jan. 1, 1878	139	39	13	30
Belt-tightener.....	C. K. Dodge.....	207,259	Aug. 20, 1878	638	190	14	203
Belt-tightener.....	F. H. C. Mey.....	203,476	May 7, 1878	253	73	13	855
Belt-tightener.....	H. R. Barber.....	203,990	May 21, 1878	818	235	13	943
Belt-tightener.....	C. T. Petchell.....	204,368	May 28, 1878	1237	352	13	1000
Belt-tightener.....	A. D. Westbrook.....	210,379	Nov. 26, 1878	944	274	14	817
Belt-tightener.....	G. A. Pickhardt.....	208,198	Sept. 17, 1878	865	196	14	442
Bench.....	D. M. Birdseye.....	205,717	July 9, 1878	288	85	14	49
Bench-dog.....	Z. Cook.....	198,763	Jan. 1, 1878	41	10	13	14
Bench-dog.....	C. Morrill.....	210,140	Nov. 19, 1878	667	198	14	778
Bench-dog.....	S. Smith.....	204,853	June 11, 1878	451	132	13	1075
Bench-hook.....	W. T. Nichols.....	210,873	Dec. 17, 1878	540	153	14	911
Bending machine, Metal.....	S. P. M. Tasker.....	205,588	July 2, 1878	129	39	14	26
Bending machine, Metal.....	C. Brombacher.....	200,689	Feb. 26, 1878	840	247	13	385
Bending machine, Sheet-metal.....	W. T. Holland.....	204,043	May 21, 1878	874	250	13	950
Bending tubular sockets, Machine for.....	J. H. Alker.....	200,595	Feb. 26, 1878	741	217	13	371
Berry-box.....	R. E. Morey and T. H. McDonald.....	207,199	Aug. 20, 1878	575	172	14	285
Berth for vessels, Self-levelling.....	D. Huston.....	209,264	Oct. 22, 1878	892	260	14	625
Berth, Suspended ship's.....	D. Parks.....	209,582	Nov. 5, 1878	46	13	14	687
Berths, Suspension-arms for sleeping-car.....	J. R. Fish.....	207,861	Sept. 10, 1878	295	90	14	390
Bessener converters, Utilizing heat from.....	A. Cooper.....	204,886	June 18, 1878	509	149	13	1086
Bevel.....	F. L. Cook.....	207,950	Sept. 10, 1878	394	119	14	402
Bevel, square, and level, Combined.....	W. P. Walter.....	201,371	Mar. 19, 1878	581	179	13	514
Beverage-carbonizing apparatus, Vitril-holder for.....	B. Bates.....	207,841	Sept. 10, 1878	274	85	14	387
Beverage-holder for table use.....	W. Parkin.....	203,190	Apr. 30, 1878	1439	421	13	810
Beverage, Table.....	S. S. Putnam.....	203,191	Apr. 30, 1878	1440	421	13	810
Billiard-bridge.....	C. F. Prentice.....	199,105	Jan. 8, 1878	389	116	13	77
Billiard-chalk holder.....	W. Zachringer.....	202,087	Apr. 2, 1878	227	66	13	631
Billiard-cue.....	C. Seymer.....	199,321	Jan. 15, 1878	625	182	13	113
Billiard-table.....	J. E. Boyle.....	203,108	Apr. 30, 1878	1349	292	13	799



## Alphabetical list of inventions—Continued.

Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Bin:							
See Grain-bin.	Lime-bin.						
See Grocer's bin.	Meal-bin.						
Binder for letters and papers, Temporary	W. A. Amberg	208,220	Sept. 24, 1878	702	207	14	451
Binder for letters, &c., Temporary	H. H. and J. K. Edwards	199,525	Jan. 22, 1878	841	245	13	155
Binder for manifold writing, Temporary	G. Southard	209,141	Oct. 22, 1878	776	226	14	408
Binder, Temporary	W. H. Bailey	209,213	Oct. 22, 1878	848	245	14	618
Binder, Temporary	W. Byrne	210,991	Dec. 17, 1878	685	188	14	928
Binder, Temporary	J. T. Foster	202,013	Apr. 2, 1878	150	44	13	621
Binder, Temporary	J. Lockhart	206,255	July 23, 1878	900	256	14	135
Binder, Temporary	J. W. Shoemaker and S. Dods-worth.	199,998	Feb. 5, 1878	105	34	13	249
Binder, Temporary	J. F. Tapley	200,630	Feb. 26, 1878	773	227	13	376
Binder, Temporary	H. E. Thompson, Jr.	200,488	Feb. 19, 1878	615	181	13	344
Binder, Temporary	J. H. Van Pelt	199,241	Jan. 15, 1878	541	160	13	100
Bird-cage	G. Seyfang	203,657	May 14, 1878	453	130	13	890
Bird-cage	A. L. Smith	199,115	Jan. 8, 1878	406	120	13	79
Bird-cage	E. Weissenborn	203,970	May 21, 1878	794	228	13	940
Bird-cage feed-cup holder	A. B. Hendryx	198,846	Jan. 1, 1878	124	36	13	28
Bird-cages, Fastening device for	C. M. Neubauer	207,063	Aug. 13, 1878	421	130	14	262
Bird-cages, Feed and water cup for	G. Günther	204,562	June 4, 1878	131	44	13	1031
Bird-cages, Food-holder for	B. A. Drayton	206,867	Aug. 13, 1878	230	73	14	239
Biscuit, Sugar-coated	J. Holmes	202,944	Apr. 30, 1878	1195		13	778
Bit:							
See Auger-bit.	Horse-bit.						
Bridle-bit.	Oil-drill bit.						
Carving-machine bit.	Ratchet-bit.						
Bit-brace	C. H. Amidon	201,379	Mar. 19, 1878	590	181	13	515
Bit-brace	C. H. Amidon	210,075	Nov. 19, 1878	599	178	14	768
Bit-brace	E. C. Merryman	208,623	Oct. 1, 1878	166	49	14	511
Bit-clamp	A. H. Crockford	206,006	July 16, 1878	610	176	14	95
Bit-stock	Q. S. Backus	204,416	June 4, 1878	3	1	13	1013
Bit-stock	C. L. Griswold	208,168	Sept. 17, 1878	638	187	14	439
Bit-stock	W. A. Ives	202,548	Apr. 16, 1878	750	217	13	710
Bit-stock	H. C. Hart	204,727	June 11, 1878	317	96	13	1060
Bit-stock	C. M. Knowles	210,335	Nov. 26, 1878	890	261	14	810
Bit-stock	C. M. Knowles	205,400	June 25, 1878	1051	311	13	1162
Blackboard	E. G. Durant	207,111	Aug. 20, 1878	487	146	14	274
Blackboard	H. W. Eastman	204,011	May 21, 1878	843	241	13	946
Blackboard attachment	J. W. Thompson	206,201	July 23, 1878	843	240	14	127
Blackboard, Folding	B. G. Luther	210,044	Nov. 19, 1878	563	169	14	763
Blackboard, Folding	C. H. Morse and M. Sholer	208,031	Sept. 17, 1878	495	147	14	420
Blackboard, Shoe	J. H. Gordon	203,138	Apr. 30, 1878	1383		13	803
Blackboard, Waterproof	C. H. Broad	204,528	June 4, 1878	99		13	1026
Blacksmith's butteris	H. B. Randall	207,348	Aug. 27, 1878	744	222	14	312
Blacksmith's combined machine	A. Pirch	199,741	Jan. 29, 1878	1079	316	13	200
Blanks, Device for receiving and arranging	H. W. Bassett	201,463	Mar. 19, 1878	691	211	13	530
Blanks, Machine for arranging and feeding	A. Delkescamp and F. B. Bradley	203,897	May 21, 1878	715	205	13	930
Blast and reverberatory furnace	C. Bennett	200,019	Feb. 5, 1878	123	40, 41	13	252
Blast-furnace	D. N. Jones	205,274	June 25, 1878	914	271	13	1145
Blast-furnace gas-check	D. N. Jones	202,730	Apr. 23, 1878	952	273, 274, 218, 219	13	743
Blast-furnaces, Flushing slag or cinder from	H. C. Grittinger	209,119	Oct. 22, 1878	751		14	605
Blasting-powder	P. M. Gallaher, W. Lloyd, and G. S. Walker.	210,197	Nov. 26, 1878	742		14	791
Blasting-powder	W. Graham and E. Ward	201,520	Mar. 19, 1878	730		13	536
Blasting rocks	T. J. Wheatley	203,097	Apr. 30, 1878	1338	389	13	797
Blasting wedge	O. F. Brockhausen	206,927	Aug. 13, 1878	295	90	14	246
Bleachers and dyes, Squeezing-machine for	W. Birch	200,427	Feb. 19, 1878	558	164	13	335
Bleaching liquids, Manufacture of	T. Simon	210,273	Nov. 26, 1878	820	243	14	801
Bleaching or dyeing apparatus	L. W. Wright	201,973	Apr. 2, 1878	110	32	13	615
Bleaching or dyeing fabrics in bulk	L. W. Wright	207,334	Aug. 20, 1878	710		14	303
Blind closer, Window	A. S. and D. W. Hammond	201,776	Mar. 26, 1878	1005	307	13	579
Blind-fastening	G. and J. Runtun	204,762	June 11, 1878	350	106	13	1064
Blind, Inside	L. D. Benner	210,902	Dec. 17, 1878	586	162	14	916
Blind, Outside window	J. Hester	201,415	Mar. 19, 1878	627	192	13	520
Blind-slat adjuster	R. Loth	204,986	June 18, 1878	610	179	13	1100
Blind-slat retainer	T. O'Regan	208,691	Oct. 8, 1878	255	72	14	530
Blind-slats, Connecting	J. G. Wilson	199,948	Feb. 5, 1878	60	19	13	242
Blind-stile boring and mortising machine	W. H. Doane and G. W. Bugbee	201,506	Mar. 19, 1878	714	217, 218	13	534
Blind-stile boring-machine	E. Cather	204,534	June 4, 1878	104	35	13	1027
Blind-stop	H. Fellows	199,278	Jan. 15, 1878	581	169	13	106
Blind-stop	A. F. Fuller	207,026	Aug. 13, 1878	387	119	14	258
Blind-stop, Window	W. B. Surdam	200,005	Feb. 5, 1878	109	36	13	258
Blind, Venetian	E. B. Lake	210,129	Nov. 19, 1878	654	194	14	776
Blind, Venetian	T. Simis	205,691	July 2, 1878	245	73	14	39
Blind, Window	H. L. Ambler	210,591	Dec. 10, 1878	231	63	14	863
Blind, Window	J. E. Godrich	207,027	Aug. 13, 1878	388	119	14	258
Blind-wiring machine	C. Hinz	207,181	Aug. 20, 1878	556	167	14	283
Block:							
See Alphabet-block.	Pulley-block.						
Arithmetical block.	Puzzle-block.						
Brush-block.	Ribbon-block.						
Engraving-block.	Saw-mill head-block.						
Hat-block.	Snatch-block.						
Last-block.	Stereotype-block.						
Printing-block.	Tackle-block.						
Blotter	J. N. Huston	209,689	Nov. 5, 1878	166	49	14	703
Blotter and moistener combined	W. W. Beach	206,414	July 30, 1878	1103	315	14	164
Blow-pipe	C. Hoffmann	209,685	Nov. 5, 1878	162	47	14	702
Blow-pipe	J. S. Hull	205,747	July 9, 1878	320	93	14	53
Blower, Fan	I. M. Phelps	206,129	July 16, 1878	742	213	14	111



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Blower, Fan .....	R. Waskey .....	203, 966	May 21, 1878	790	226	14	940
Blower, Fan .....	T. Wise .....	203, 306	May 7, 1878	77	23	14	830
Blower, Fire-place .....	S. P. Ruggles .....	204, 506	June 4, 1878	80	27	13	1024
Blower for blacksmith's-forges .....	W. H. Rankin .....	207, 775	Sept. 3, 1878	194	59	14	373
Blower machine, Fan .....	A. K. Herr .....	203, 340	May 7, 1878	108	32	13	835
Blower, Steam .....	R. Atherton .....	210, 832	Dec. 17, 1878	488	137	14	905
Bluing package .....	H. Sawyer .....	210, 808	Dec. 10, 1878	457	129	14	892
Bluing package, Laundry .....	C. H. Fischer .....	203, 130	Apr. 30, 1878	1374	400	13	802
Board:							
See Blackboard. Musical transposing-board.							
Bosom-board. Paper-board.							
Center-board. Piano-forte sound-board.							
Cutting-board. Scouring-board.							
Dash-board. Stove-board.							
Game-board. Wash-board.							
Ironing-board. Musical instrument key-board.							
Boards from warping, Device for preventing .....	W. B. Allen .....	209, 371	Oct. 29, 1878	1017	296	14	645
Boat:							
See Canal-boat. Outrigger-boat.							
Dumping-boat. Torpedo-boat.							
Life-boat.							
Boat attaching and detaching apparatus .....	B. A. Fiske .....	200, 270	Feb. 12, 1878	389	115	13	301
Boat-detaching apparatus .....	H. Ashford .....	208, 280	Sept. 24, 1878	772	226	14	459
Boat-detaching apparatus .....	B. A. Fiske .....	206, 100	July 16, 1878	702	203	14	107
Boat-detaching apparatus .....	C. P. Wyckoff .....	200, 159	Feb. 12, 1878	279	83	13	284
Boat-knee .....	D. True .....	200, 632	Feb. 26, 1878	775	228	13	376
Boats, Apparatus for raising and lowering .....	M. Bourke .....	210, 908	Dec. 17, 1878	593	164	14	917
Boats, Outrigger and rowlock for .....	R. Roberts and J. L. Knight .....	207, 070	Aug. 13, 1878	427	132	14	262
Bobbin .....	J. S. Crowley .....	205, 246	June 25, 1878	888	268	13	1142
Bobbin .....	O. E. Wait .....	210, 977	Dec. 17, 1878	669	184	14	926
Bobbin and spool .....	R. C. Fay .....	200, 706	Feb. 26, 1878	860	253	13	388
Bobbin for loom-shuttles .....	J. B. Buzzell .....	202, 929	Apr. 30, 1878	1180	340	13	776
Bobbin-holder .....	G. H. Dimond .....	207, 400	Aug. 27, 1878	794	236	14	318
Bobbin-shuttle .....	R. W. Porter .....	202, 664	Apr. 23, 1878	890	215	13	736
Bobbin used in spinning mohair, &c .....	T. Mitchell .....	203, 754	May 14, 1878	156	157	13	902
Bobbin-winder .....	W. Duchemin .....	205, 532	July 2, 1878	72	21	14	18
Bobbin-winder .....	N. S. C. Perkins .....	201, 044	Mar. 5, 1878	225	71	13	449
Bobbin-winding machine .....	J. Bullock .....	203, 114	Apr. 30, 1878	1354	394	13	799
Bobbins, Machine for making .....	G. W. Glazier and O. E. Wait .....	209, 614	Nov. 5, 1878	82	24, 25	14	692
Boiler:							
See Agricultural boiler. Locomotive-boiler.							
Beer-boiler. Milk-boiler.							
Cast and wrought iron boiler. Sectional boiler.							
Clothes-boiler. Steam-boiler.							
Domestic boiler. Steam-engine boiler.							
Feed-boiler. Tubular boiler.							
Fire-engine boiler. Wash-boiler.							
Fire-tube boiler. Water-boiler.							
Water-tube boiler.							
Boiler and furnace regulator .....	J. A. Lakin .....	209, 972	Nov. 19, 1878	488	148	14	753
Boiler and other furnaces, Heating attachment to .....	S. N. Carvalho .....	202, 148	Apr. 9, 1878	307	91	13	647
Boiler-brooms, Operating .....	A. C. Cock .....	204, 200	May 28, 1878	1067	304	13	978
Boiler-cleaner .....	A. W. Bishop .....	201, 986	Apr. 2, 1878	123	36	13	617
Boiler-covering .....	J. L. Menell .....	205, 199	June 25, 1878	838	249	13	1135
Boiler-covering .....	J. B. and F. D. Sanner .....	204, 455	June 4, 1878	39	13	13	1018
Boiler-covering .....	F. B. Stevens .....	200, 937	Nov. 12, 1878	435	131	14	743
Boiler-covering .....	A. Sweeney .....	205, 587	July 2, 1878	129	39	14	26
Boiler-covering compound .....	G. S. Fowler .....	205, 906	May 21, 1878	729	....	13	932
Boiler-feeder, Automatic .....	J. M. Simpson .....	210, 365	Nov. 26, 1878	924	269	14	815
Boiler-feeder, Automatic .....	F. A. Wells .....	207, 326	Aug. 20, 1878	702	209	14	301
Boiler-furnace .....	W. Ayres .....	200, 815	Mar. 5, 1878	2	1	13	415
Boiler-furnace .....	S. H. Bevins .....	202, 981	Apr. 30, 1878	1231	355	13	788
Boiler-furnace .....	J. Jenks .....	202, 657	Apr. 23, 1878	882	253	13	735
Boiler-furnace .....	J. L. Winslow .....	203, 688	May 14, 1878	485	138	13	894
Boiler furnace grate, Steam .....	J. E. Wootton .....	203, 233	Apr. 30, 1878	1482	434	13	815
Boiler furnace, Locomotive .....	F. Reimherr .....	202, 375	Apr. 16, 1878	564	165	13	686
Boiler furnace, Steam .....	J. W. Bookwalter .....	209, 218	Oct. 22, 1878	851	246	14	619
Boiler furnace, Steam .....	J. Enright and J. L. Heald .....	203, 253	May 7, 1878	17	7	13	823
Boiler furnace, &c., Steam .....	W. S. Hutchinson .....	208, 394	Sept. 24, 1878	886	258	14	473
Boiler furnace, Steam .....	C. D. Smith .....	208, 209	Sept. 17, 1878	679	199	14	444
Boiler-furnaces, Apparatus for supplying steam-blasts to .....	E. R. Stege .....	200, 674	Feb. 26, 1878	823	242	13	383
Boiler furnaces, Combustion of fuel in steam .....	G. W. Morrison .....	203, 485	May 7, 1878	262	75	13	856
Boiler furnaces, Damper-regulator for steam .....	W. R. Cole .....	199, 692	Jan. 29, 1878	1037	{ 302 303 261 262 }	13	194
Boiler-heads, Machine for flanging .....	L. Campbell and J. F. Richards .....	205, 241	June 25, 1878	884	{ 261 262 }	13	1141
Boiler-plates, Inserting bolts in .....	N. S. Barritt .....	204, 650	June 11, 1878	234	73	13	1049
Boiler-tubes, Coating .....	R. Brayton, D. June, and O. S. French .....	205, 038	June 18, 1878	660	194	13	1106
Boilers, Bolt for patching .....	F. A. Bidwell .....	202, 403	Apr. 16, 1878	589	173	13	690
Boilers, Combined heater and feeder for .....	R. N. Pratt .....	209, 584	Nov. 5, 1878	48	13, 14	14	687
Boilers, Connecting "sputs" to .....	J. Trageser .....	210, 476	Dec. 3, 1878	89	22	14	835
Boilers, Device for patching .....	F. A. Bidwell .....	209, 603	Nov. 5, 1878	72	20	14	690
Boilers, Fastening bottoms in .....	W. H. Cloke .....	198, 794	Jan. 1, 1878	78	20	13	19
Boilers, Stay-bolt for .....	T. M. Leddy .....	206, 801	Aug. 6, 1878	148	46	14	225
Boilers, Steam generating and heating device for .....	E. G. Good .....	207, 732	Sept. 3, 1878	152	46	14	368
Boilers, Water-feeding device for .....	B. F. Fitch .....	210, 513	Dec. 3, 1878	131	34	14	841
Boilers, Water purifier and heater for .....	J. J. Ralya .....	203, 646	May 14, 1878	441	126	13	888

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Bolt: See Clevis-bolt.      Lock-bolt. Door-bolt.            Middlings-bolt. Flour-bolt.           Safe-bolt. King-bolt.            Seal-bolt.							
Bolt.....	W. C. Shipherd.....	203, 658	May 14, 1878	454	130	13	800
Bolt and nut.....	H. A. Harvey.....	204, 036	May 21, 1878	869	248	13	949
Bolt-clipping machine.....	C. Chambers, jr., and W. Mendham.....	207, 252	Aug. 20, 1878	631	189	14	292
Bolt for fastening doors, &c.....	W. F. Hyatt.....	199, 832	Jan. 29, 1878	1168	334	13	214
Bolt-heading machine.....	C. B. Allen.....	203, 982	May 21, 1878	806	231	13	942
Bolt-holder and clamping tool.....	F. Morris and C. E. Sweet.....	199, 220	Jan. 15, 1878	523	154	13	97
Bolt-threading machine.....	O. P. Briggs.....	199, 686	Jan. 29, 1878	1030	300	13	192
Bolt-threading machine.....	T. Thomas.....	207, 084	Aug. 13, 1878	440	136	14	204
Bolts, &c., Machine for impressing screw-threads on bolting-reel.....	C. Fairbairn and H. Simon.....	200, 522	Feb. 19, 1878	648	191	13	349
Bonbon wrapper.....	T. O. Kilburn.....	206, 459	July 30, 1878	1154	331	14	171
Bone-black furnaces, Measuring and discharging apparatus for.....	I. J. Van Skelline.....	205, 448	June 25, 1878	1098	325	13	1169
Bone-black furnaces, Measuring and discharging apparatus for.....	E. K. Richards.....	206, 263	July 23, 1878	909	259	14	136
Book.....	J. J. Bruner.....	203, 410	May 7, 1878	181	52	13	845
Book and cover.....	J. W. H. Reisinger.....	200, 762	Feb. 26, 1878	912	268	13	396
Book-binder's beveling-machine.....	H. W. Rokker.....	200, 804	Feb. 26, 1878	952	280	13	402
Book-binder's dry-press and sheet-tie.....	J. W. Jones.....	204, 741	June 11, 1878	329	100	13	1061
Book-binding.....	F. S. Harbrouck.....	207, 806	Sept. 10, 1878	236	74	14	382
Book-binding.....	G. B. Huntington.....	205, 095	June 18, 1878	717	213	12	1114
Book-binding.....	J. S. Lever.....	200, 068	Feb. 5, 1878	177	57	13	201
Book-binding.....	I. Reynolds.....	201, 450	Mar. 19, 1878	662	201	13	525
Book-binding, Removable.....	I. Reynolds.....	199, 572	Jan. 22, 1878	884	259	13	102
Book, Blank.....	J. W. H. Reisinger.....	205, 137	June 18, 1878	758	266	13	1120
Book-clamp.....	H. C. Bailey.....	203, 576	May 14, 1878	376	107	13	880
Book, Copying.....	W. D. Chandler, E. Wickstead, and J. D. Van Voorhis.....	210, 239	Nov. 26, 1878	786	233	14	797
Book-cover.....	J. E. Fargo.....	210, 193	Nov. 26, 1878	739	219	14	791
Book-cover, Detachable.....	E. F. Newkirk.....	208, 689	Oct. 8, 1878	253	72	14	530
Book-cover protector.....	D. W. Page.....	210, 432	Dec. 3, 1878	43	10	14	829
Book-cover protector.....	L. D. Reynolds.....	210, 711	Dec. 10, 1878	355	97	14	878
Book-holder.....	W. R. E. Berth.....	206, 216	July 23, 1878	857	244	14	129
Book-holder.....	J. B. Brown.....	204, 947	June 18, 1878	573	167	13	1095
Book-holder.....	E. and E. R. Young and F. E. Hafely.....	204, 872	June 11, 1878	476	138	13	1078
Book-rack.....	J. M. Clark.....	202, 790	Apr. 23, 1878	1017	292	13	752
Book-rack.....	A. R. Sherman.....	200, 576	Feb. 19, 1878	703	206	13	357
Book-rack.....	A. R. Sherman.....	203, 080	Apr. 30, 1878	1324	385	13	795
Book-shelf.....	S. A. Smith.....	200, 773	Feb. 26, 1878	921	271	13	898
Book-shelf bracket.....	S. A. Smith.....	200, 772	Feb. 26, 1878	920	271	13	98
Book-support.....	F. W. Pearson.....	202, 959	Apr. 30, 1878	1209	349	13	780
Book-stitching machine.....	R. L. Brewer.....	208, 287	Sept. 24, 1878	779	227	14	459
Book-stitching machine.....	A. A. Johnson.....	210, 782	Dec. 10, 1878	430	120	14	888
Book, Subscription.....	E. W. Pierce.....	204, 504	June 4, 1878	78	27	13	1024
Book-support.....	A. E. Dolbear.....	204, 427	June 4, 1878	13	5	13	1014
Book-support.....	M. L. Schoch.....	208, 039	Sept. 17, 1878	563	150	14	421
Book-support.....	J. S. Turner.....	205, 156	June 18, 1878	782	231	13	1123
Books, Leaf-holder for.....	F. C. Gerard.....	207, 691	Sept. 3, 1878	17	6	14	351
Books, Machine for preparing fly-leaves for.....	E. Crawley.....	202, 156	Apr. 9, 1878	317	94, 95	13	648
Books, Metallic binder for.....	D. R. Reynolds.....	211, 050	Dec. 17, 1878	765	210	14	937
Book.....	T. Poore.....	209, 357	Oct. 29, 1878	1001	291	14	643
Book.....	H. E. Van Benschoten.....	210, 824	Dec. 10, 1878	474	133	14	894
Boot and shoe.....	F. Goff.....	202, 256	Apr. 9, 1878	422	123	13	602
Boot and shoe.....	J. L. Joyce.....	208, 740	Oct. 8, 1878	302	87	14	537
Boot and shoe.....	T. Poore.....	202, 865	Apr. 23, 1878	1101	316	13	702
Boot and shoe.....	E. F. Richardson.....	206, 041	July 16, 1878	643	187	14	99
Boot and shoe.....	A. Van Wagenen.....	206, 985	Aug. 13, 1878	346	106	14	253
Boot and shoe.....	A. Van Wagenen.....	207, 227	Aug. 20, 1878	604	182	14	289
Boot and shoe channeling machine.....	C. K. Sharood.....	202, 478	Apr. 16, 1878	661	198	13	701
Boot and shoe cleaner.....	G. F. Ziegler.....	210, 072	Nov. 19, 1878	595	177	14	767
Boot and shoe counter stiffener.....	F. S. Dawes.....	201, 796	Mar. 26, 1878	1023	312	13	581
Boot and shoe counter stiffener.....	W. H. Richardson.....	199, 574	Jan. 22, 1878	886	260	13	163
Boot and shoe counter stiffeners, Machine and process for shaping.....	J. R. Moffitt.....	208, 534	Oct. 1, 1878	78	23	14	499
Boot and shoe counter support.....	B. W. Campbell.....	202, 409	Apr. 16, 1878	594	175	13	691
Boot and shoe counter support.....	W. H. Koopman.....	208, 612	Oct. 1, 1878	156	46	14	510
Boot and shoe counter support and seam-protector.....	J. Wissen.....	208, 943	Oct. 15, 1878	538	158	14	572
Boot and shoe counters, Machinery for skiving.....	S. D. Tripp.....	207, 223	Aug. 20, 1878	508	180	14	288
Boot and shoe counters or stiffeners, Machinery for molding.....	J. Kieffer.....	205, 191	June 25, 1878	830	246	13	1134
Boot and shoe crimping board.....	G. Schallenberg.....	200, 346	Feb. 12, 1878	466	137	13	313
Boot and shoe crimping machine.....	J. S. Perkins.....	206, 195	July 23, 1878	834	238	14	126
Boot and shoe exhibitor.....	A. C. W. Cain.....	200, 128	Feb. 12, 1878	246	75	13	280
Boot and shoe foxings, Machine for crimping seamless.....	H. Hübel.....	199, 714	Jan. 29, 1878	1056	309	13	136
Boot and shoe fronts, Machine for marking.....	G. C. Wilson.....	209, 741	Nov. 5, 1878	223	67	14	711
Boot and shoe heel.....	J. Dalton.....	199, 801	Jan. 29, 1878	1139	334	13	209
Boot and shoe heel.....	W. Hill.....	201, 247	Mar. 12, 1878	433	133	13	486
Boot and shoe heel.....	P. Miller.....	209, 500	Oct. 29, 1878	1146	324	14	664
Boot and shoe heel.....	J. K. Tillotson.....	207, 370	Aug. 27, 1878	763	237	14	315
Boot and shoe heel.....	J. Tingley.....	209, 944	Nov. 12, 1878	443	134	14	744
Boot and shoe heel plate.....	L. W. Buxton.....	200, 505	Feb. 19, 1878	631	186	13	346
Boot and shoe heel shave.....	F. P. Warren.....	205, 593	July 2, 1878	133	40	14	26
Boot and shoe heel stiffeners, Machine for molding.....	M. J. Simonds.....	201, 457	Mar. 19, 1878	668	204	13	526
Boot and shoe heel stiffeners, Machine for forming.....	J. R. Moffitt.....	209, 826	Nov. 12, 1878	320	95	14	727
Boot and shoe heels, Machine for attaching.....	P. Hogan and D. Whitlock.....	206, 237	July 23, 1878	878	250	14	132
Boot and shoe heels, Machine for making.....	G. Creter.....	205, 948	July 16, 1878	549	156	14	87

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				Spec.	Dr. & C.	Vol.	Page.
Boot and shoe heels, Machine for trimming	I. Van Noughuys and T. P. King	208,653	Oct. 1, 1878	204	59	14	516
Boot and shoe heels, Machine for trimming	M. A. Tyler	203,510	May 7, 1878	285	82	13	860
Boot and shoe heels, Manufacture of	S. T. Gates	202,808	Apr. 23, 1878	1040	300	13	755
Boot and shoe heeling devices, Machine for feeding nails to.	S. Harris, jr., and S. Shepherd	210,528	Dec. 3, 1878	149	39, 40	14	843
Boot and shoe heeling machine	C. W. Glidden	203,440	May 7, 1878	217	62	13	870
Boot and shoe holder	N. Lyon	200,619	Feb. 26, 1878	765	225	13	374
Boot and shoe, India-rubber	G. Watkinson	208,776	Oct. 8, 1878	344	98	14	542
Boot and shoe insole	G. H. Lewis	198,989	Jan. 8, 1878	281	81	13	59
Boot and shoe insole	T. S. Mattocks and J. Wise	199,842	Jan. 29, 1878	1177	345	13	215
Boot and shoe insole	M. Mayer	208,190	Sept. 17, 1878	659	194	14	442
Boot and shoe insole	J. F. Nickerson	209,184	Oct. 22, 1878	822	237	14	614
Boot and shoe jack	G. McKay	199,304	Jan. 15, 1878	607	177	13	110
Boot and shoe lasting apparatus	H. Gerred	204,963	June 18, 1878	589	172	13	1097
Boot and shoe lasting jack	E. J. E. Rollins	209,986	Nov. 19, 1878	499	152	14	755
Boot and shoe lasting machine	G. W. Copeland	201,914	Apr. 2, 1878	56	15	13	607
Boot and shoe lasting machine	G. W. Copeland, E. Woodward, and M. Brock	208,156	Sept. 17, 1878	622	184	14	437
Boot and shoe lasting machine	J. E. Wheeler and M. V. B. Ethridge	206,203	July 23, 1878	846	241	14	128
Boot and shoe lasting mechanism	H. G. Thompson	208,127	Sept. 17, 1878	589	175	14	433
Boot and shoe machines, Burnishing-head for	Z. Beaudry	198,835	Jan. 1, 1878	112	32	13	26
Boot and shoe nail	H. N. Allen	200,240	Feb. 12, 1878	353	105	13	296
Boot and shoe nailing last	G. V. Wells	198,958	Jan. 8, 1878	248	71	13	54
Boot and shoe nailing machine	H. Dunham	207,956	Sept. 10, 1878	398	120 121	14	402
Boot and shoe nailing machine	J. E. Kimball	205,652	July 2, 1878	197	59	14	34
Boot and shoe, Rubber	S. E. Whittenmore	202,082	Apr. 2, 1878	223	65	13	630
Boot and shoe, Rubber	S. E. Whittenmore	205,711	July 2, 1878	264	79	14	42
Boot and shoe seams, Machine for rubbing	W. Manley	205,562	July 2, 1878	105	30, 31	14	22
Boot and shoe seams, Rubbing apparatus for	W. Manley	206,467	July 30, 1878	1161	333	14	171
Boot and shoe seams, Stay for	G. Stribley	203,300	May 7, 1878	71	21	14	830
Boot and shoe seams, Staying	D. A. Sutherland	206,641	July 30, 1878	1343	387	14	194
Boot and shoe shank stiffener, Metallic	J. G. Whittier	204,644	June 4, 1878	219	70	13	1043
Boot and shoe sole	H. C. Goodrich	204,431	June 4, 1878	17	6	13	1015
Boot and shoe sole	H. C. Goodrich	207,602	Sept. 3, 1878	18	6	14	352
Boot and shoe sole channeling machine	J. S. Turner	200,232	Feb. 12, 1878	346	103	13	295
Boot and shoe sole edge-trimming apparatus	J. D. Westgate	210,829	Dec. 10, 1878	477	135	14	895
Boot and shoe sole edge-trimming machine	C. J. Addy	201,977	Apr. 2, 1878	114	33	13	615
Boot and shoe sole edge-trimming machine	C. H. Helms	206,671	Aug. 6, 1878	13	4, 5	14	208
Boot and shoe sole edges, Tool for cutting lines in	E. Scopes	199,749	Jan. 29, 1878	1086	318	13	201
Boot and shoe sole finishing machine	F. E. Larrabee	207,610	Sept. 3, 1878	25	9	14	552
Boot and shoe sole protector	A. F. Schurr	201,128	Mar. 12, 1878	314	96	13	469
Boot and shoe sole trimming and finishing machine	I. Adams	209,787	Nov. 12, 1878	282	84	14	723
Boot and shoe soles and heels, Metallic protector for	H. E. Van Benschoten	201,070	Mar. 5, 1878	248	78	13	452
Boot and shoe soles and heels, Rotary cutter for trimming	J. H. Busell	210,006	Nov. 19, 1878	526	158	14	758
Boot and shoe soles, Apparatus for dressing	G. Danforth	210,103	Nov. 12, 1878	629	186	14	772
Boot and shoe soles, Manufacture of	A. B. Jones	209,482	Oct. 29, 1878	1129	329	14	662
Boot and shoe stay	A. Seaver	208,339	Sept. 24, 1878	832	243	14	467
Boot and shoe stiffeners, Machine for skiving	D. H. Thomas	201,069	Mar. 5, 1878	247	78	13	452
Boot and shoe stiffeners, Mold for	S. W. Record	210,961	Dec. 17, 1878	648	180	14	924
Boot and shoe tap sole	D. R. Proctor	202,191	Apr. 9, 1878	357	105	13	653
Boot and shoe upper	M. Hauber	210,529	Dec. 3, 1878	153	40	14	843
Boot-cleaner	G. F. Blauvelt	199,497	Jan. 22, 1878	804	236	13	150
Boot, India-rubber	L. Elliott, jr.	206,308	July 23, 1878	964	273	14	143
Boot, India-rubber	G. Watkinson	205,932	July 9, 1878	520	148	14	78
Boot, India-rubber	G. Watkinson	209,312	Oct. 22, 1878	941	275	14	631
Boot-jack	S. B. Bartine	206,523	July 30, 1878	1219	351	14	179
Boot-jack	J. B. Lauffer	199,557	Jan. 22, 1878	870	255	13	161
Boot-jack	F. T. Lessen	210,131	Nov. 19, 1878	657	195	14	776
Boot-jack	J. Martin	210,795	Dec. 10, 1878	444	124	14	890
Boot-jack	J. Roberts	207,209	Aug. 20, 1878	586	176	14	287
Boot-jack	M. Ross	193,996	Feb. 5, 1878	103	34	13	249
Boot-jack	C. Tyson	209,091	Oct. 15, 1878	703	203	14	593
Boot, Lady's	J. Dean	202,244	Apr. 9, 1878	411	119	13	661
Boot-legs, Device for stretching	J. H. Walker	201,370	Mar. 19, 1878	580	179	13	514
Boot-legs, Machine for smoothing and finishing	M. V. B. Ethridge	204,662	June 4, 1878	245	77	13	1050
Boot, Plowman's	J. H. Walker	207,783	Sept. 3, 1878	202	62	14	374
Boot, Rubber	J. T. Flynn	201,766	Mar. 26, 1878	995	304	13	577
Boot-tree	J. T. Flynn	200,525	Feb. 19, 1878	652	192	13	349
Boot-upper	S. W. Allen and I. Cook	202,393	Apr. 16, 1878	579	170	13	689
Bootee	C. McKiernan	207,431	Aug. 27, 1878	827	245	14	322
Boots and mittens, Apparatus for drying moist	B. F. Buxton	208,070	Sept. 17, 1878	531	159	14	425
Boots and shoes, Bufling-wheel for finishing	C. C. Green	203,265	May 7, 1878	30	10	13	824
Boots and shoes, Device for pulling off	W. C. Peckham and D. F. McKittrick	209,919	Nov. 12, 1878	414	124	14	740
Boots and shoes, Hand lasting tool for	F. P. Hinds	206,019	July 16, 1878	620	179 180	14	96
Boots and shoes, Lasting	A. F. Chase	205,837	July 9, 1878	419	119	14	66
Boots and shoes, Lasting	G. W. Copeland	210,920	Dec. 17, 1878	606	168	14	919
Boots and shoes, Lasting	J. W. Hatch	205,745	July 9, 1878	318	93	14	53
Boots and shoes, Lasting	T. M. Newhall and A. F. Chase	202,955	Apr. 30, 1878	1205	348	13	779
Boots and shoes, Machine for treeing	W. Corney	200,979	Mar. 5, 1878	154	50, 51	13	439
Boots and shoes, Machinery for cutting pegs from	H. O. Cheney	199,790	Jan. 29, 1878	1128	331	13	208
Boots and shoes, Manufacture of	C. C. Ballou	204,785	June 11, 1878	381	113	13	1067
Boots and shoes, Manufacture of	C. C. Ballou	204,786	June 11, 1878	383	114	13	1067
Boots and shoes, Manufacture of	J. Hurst and W. R. Miller	204,330	May 28, 1878	1197	341	13	995
Boots and shoes, Manufacture of	G. H. Jones	204,979	June 18, 1878	603	176	13	1099
Boots and shoes, Manufacture of	J. Northrup	205,571	July 2, 1878	117	34	14	24
Boots and shoes, Manufacture of	H. Wight	206,377	July 23, 1878	1047	301	14	153
Boots and shoes, Metallic button-hole stay for	D. Crane	208,296	Sept. 24, 1878	788	230	14	461
Boots and shoes, Metallic nail-strips for	W. F. Prusha	200,839	Mar. 5, 1878	27	9	13	419
Boots and shoes, Rotary cutter for	S. N. Cortrell	207,395	Aug. 27, 1878	789	234	14	318

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Boots and shoes, Stretcher for forming swells or enlargements in the uppers of.	J. J. Adgate.....	210, 285	Nov. 26, 1878	834	246	14	803
Boots and shoes, Tool for fastening buttons to.	A. Wisner and J. A. House.....	206, 288	July 23, 1878	940	266	14	140
Boots and shoes, Ventilating	I. Schwarzwald.....	206, 267	July 23, 1878	913	259	14	126
Boots, Manufacture of.	W. R. Miller.....	205, 200	June 25, 1878	830	249	13	1125
Boots, Manufacture of.	W. R. Miller.....	205, 288	June 25, 1878	931	276	13	1147
Boots, Manufacture of.	W. R. Miller and M. R. Creighton.	204, 068	May 21, 1878	900	258	13	953
Boots, shoes, hats, &c., Mechanism for forming bats for.	A. A. and R. B. Hawley.....	204, 668	June 11, 1878	252	79	13	1051
Boring and drilling apparatus	J. Hall.....	200, 285	Feb. 12, 1878	400	119	13	363
Boring-machine	H. C. Cloyd.....	206, 091	July 16, 1878	694	200	14	106
Boring-machine	T. G. Morse.....	208, 030	Sept. 17, 1878	494	147	14	420
Boring-machine	J. Swan.....	210, 220	Nov. 26, 1878	766	227	14	794
Boring-machine	E. S. Winchester.....	208, 450	Sept. 24, 1878	949	278	14	461
Boring-machine, Post	C. F. Stahler.....	205, 920	July 9, 1878	507	144	14	77
Boring-machine, Wood	T. O. Selfridge.....	202, 477	Apr. 16, 1878	660	193	13	709
Boring or broaching apparatus	J. J. Love.....	200, 071	Feb. 5, 1878	180	58	13	251
Bosom-board	A. Brown.....	206, 770	Aug. 6, 1878	116	36	14	221
Bosom-board	R. McCoy.....	205, 115	June 18, 1878	735	219	13	1117
Bosom-board	W. W. Nixon.....	206, 350	July 23, 1878	1017	291	14	149
Bosom-board	M. Price.....	208, 120	Sept. 17, 1878	584	173	14	432
Bosom-board	J. B. Sweetland.....	203, 215	Apr. 30, 1878	1466	429	13	813
Bosom-form	J. D. Banfield.....	202, 398	Apr. 16, 1878	582	171	13	689
Bosom-pad	J. C. Tallman.....	204, 460	June 4, 1878	43	14	13	1018
Bottle	G. W. Clark.....	207, 502	Aug. 27, 1878	903	266	14	331
Bottle, Blacking	S. S. Newton.....	208, 758	Oct. 8, 1878	325	93	14	539
Bottle-dredge	J. W. Haines.....	204, 504	June 4, 1878	132	44	13	1031
Bottle-capper	J. Sacksteder.....	199, 581	Jan. 22, 1878	893	262	13	164
Bottle-corking machine	J. C. M. Braun.....	207, 244	Aug. 20, 1878	623	186	14	291
Bottle-corks, Clamp for securing	A. Templeton.....	205, 011	June 18, 1878	633	186	13	1102
Bottle-filling apparatus	H. Codd.....	203, 243	May 7, 1878	7	3	13	822
Bottle, jug, and jar cover	J. M. Lewin.....	206, 254	July 23, 1878	899	256	14	135
Bottle-packing case	P. and R. P. Aitcheson.....	200, 161	Feb. 12, 1878	280	84	13	294
Bottle-packing case or box	A. Hackelberg.....	203, 727	May 14, 1878	526	149	13	806
Bottle, Pepper and table-salt	J. A. Robbins.....	205, 576	July 2, 1878	121	36	14	24
Bottle-register	W. S. Lynn.....	200, 552	Feb. 19, 1878	680	200	13	333
Bottle-register	J. H. Welch.....	205, 019	June 18, 1878	639	188	13	1104
Bottle-register	J. H. Welch.....	205, 158	June 18, 1878	783	232	13	1123
Bottle, Salt and spice.	G. B. Richardson.....	198, 998	Jan. 8, 1878	290	85	13	69
Bottle-stopper	A. E. N. Aguel.....	205, 228	June 25, 1878	869	257	13	1139
Bottle-stopper	A. Albertson.....	204, 472	June 4, 1878	55	17	13	1020
Bottle-stopper	A. E. Barthel.....	202, 138	Apr. 9, 1878	298	88	13	645
Bottle-stopper	H. Bell.....	208, 146	Sept. 17, 1878	612	181	14	436
Bottle-stopper	J. W. Curtis.....	200, 984	Mar. 5, 1878	159	52	13	449
Bottle-stopper	W. H. Dabbs.....	209, 466	Oct. 29, 1878	1111	324	14	659
Bottle-stopper	A. F. Dietz.....	200, 991	Mar. 5, 1878	166	54	13	441
Bottle-stopper	W. D. Doremus.....	202, 525	Apr. 16, 1878	706	206	13	706
Bottle-stopper	J., sr., and A. Douleron, jr.....	210, 105	Nov. 19, 1878	630	187	14	772
Bottle-stopper	N. Fox.....	202, 714	Apr. 23, 1878	940	269	13	741
Bottle-stopper	N. Fritzner.....	202, 100	Apr. 9, 1878	259	75	13	640
Bottle-stopper	G. W. Gumber.....	202, 434	Apr. 16, 1878	621	182	13	605
Bottle-stopper	W. H. Hicks.....	201, 011	Mar. 5, 1878	189	60	13	444
Bottle-stopper	W. H. Kelley.....	199, 980	Feb. 5, 1878	88	29	13	247
Bottle-stopper	F. Koeller.....	208, 403	Sept. 24, 1878	894	261	14	475
Bottle-stopper	H. Martin.....	204, 350	May 28, 1878	1217	347	13	997
Bottle-stopper	T. Massey and W. H. Rawe.....	204, 987	June 18, 1878	611	179	13	1100
Bottle-stopper	S. S. Newton.....	208, 690	Oct. 8, 1878	254	72	14	530
Bottle-stopper	S. Oakman.....	208, 487	Oct. 1, 1878	32	10	14	493
Bottle-stopper	N. Prescott.....	201, 891	Apr. 2, 1878	32	9	13	603
Bottle-stopper	L. Rose.....	200, 409	Feb. 19, 1878	538	159	13	332
Bottle-stopper	C. Sedgwick.....	202, 059	Apr. 2, 1878	197	58	13	627
Bottle-stopper	F. J. Seybold.....	201, 933	Apr. 2, 1878	88	25	13	612
Bottle-stopper	F. J. Seybold.....	206, 269	July 23, 1878	915	260	14	137
Bottle-stopper	F. J. Seybold.....	206, 270	July 23, 1878	918	260	14	137
Bottle-stopper	F. J. Seybold.....	208, 043	Sept. 17, 1878	508	151	14	422
Bottle-stopper	W. G. Steinmetz.....	208, 647	Oct. 1, 1878	196	50	14	515
Bottle-stopper	D. E. Stevens.....	204, 105	May 21, 1878	940	269	13	953
Bottle-stopper	W. Y. Whitman.....	202, 320	Apr. 9, 1878	490	143	13	671
Bottle stopper and fastener	P. Madlener.....	209, 490	Oct. 29, 1878	1134	331	14	663
Bottle stopper and sprinkler	T. J. Holmes.....	207, 279	Aug. 20, 1878	660	195	14	296
Bottle-stopper and stopper-fastener	F. Denning and P. Bacher.....	210, 926	Dec. 17, 1878	611	169	14	920
Bottle-stopper and stopper-fastener	H. W. Putnam.....	207, 982	Sept. 10, 1878	428	129	14	407
Bottle-stopper and stopper-fastener	F. J. Seybold.....	206, 492	July 30, 1878	1190	342	14	175
Bottle-stopper and stopper-fastener	F. J. Seybold.....	206, 493	July 30, 1878	1191	342	14	175
Bottle-stopper cages, Mold for	H. Wright.....	208, 662	Oct. 1, 1878	213	61	14	517
Bottle-stopper fastener	A. E. Barthel.....	202, 137	Apr. 9, 1878	297	88	13	645
Bottle-stopper fastener	A. E. Barthel.....	206, 525	July 30, 1878	1221	351	14	732
Bottle-stopper fastener	J. Bryan.....	209, 857	Nov. 12, 1878	355	106	14	732
Bottle-stopper fastener	P. H. Caverly.....	200, 237	Feb. 12, 1878	372	110	13	293
Bottle-stopper fastener	H. W. Dee.....	210, 505	Dec. 3, 1878	120	31, 32	14	839
Bottle-stopper fastener	F. N. Frost.....	201, 662	Mar. 26, 1878	891	271	14	20
Bottle-stopper fastener	H. Halvorsen.....	205, 546	July 2, 1878	87	24	13	884
Bottle-stopper fastener	C. O. Hammer.....	203, 615	May 14, 1878	409	117	13	995
Bottle-stopper fastener	L. Kutscher.....	204, 341	May 28, 1878	1208	344	14	71
Bottle-stopper fastener	H. Leehr.....	205, 881	July 9, 1878	404	152	14	143
Bottle-stopper fastener	H. Martin.....	206, 341	July 23, 1878	1007	287	13	283
Bottle-stopper fastener	G. F. Outten.....	200, 696	Feb. 26, 1878	815	240	13	89
Bottle-stopper fastener	F. W. Perry.....	199, 165	Jan. 15, 1878	471	159	13	293
Bottle-stopper fastener	C. Sedgwick.....	200, 224	Feb. 12, 1878	338	101	13	612
Bottle-stopper fastener	F. J. Seybold.....	201, 954	Apr. 2, 1878	90	26	14	444
Bottle-stopper fastener	T. H. Shahan.....	208, 205	Sept. 17, 1878	675	198	14	444
Bottle-stopper fastener	T. H. Shahan.....	208, 206	Sept. 17, 1878	676	198	13	116
Bottle-stopper fastener	E. D. Wayburn.....	199, 337	Jan. 15, 1878	640	187	13	289
Bottle-stopper fastening	J. B. Griffin.....	200, 191	Feb. 12, 1878	308	92	14	830
Bottle-stopper fastening	T. S. Smith.....	210, 438	Dec. 3, 1878	51	12	14	830



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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Bottle-stopper holder .....	J. Metzger .....	198,992	Jan. 8, 1878	285	83	13	60
Bottle-stopper, Measuring .....	W. L. Keller .....	202,268	Apr. 9, 1878	433	126	13	664
Bottle-stoppers, Cap for .....	J. P. Lindsay .....	210,545	Dec. 3, 1878	169	44	14	845
Bottle-stopping machine .....	A. R. Weiss .....	202,080	Apr. 2, 1878	220	64	13	630
Bottle-washer .....	P. Seibel, jr .....	207,311	Aug. 20, 1878	688	205	14	300
Bottle-washing machine .....	C. Michel .....	202,740	Apr. 23, 1878	966	278	13	745
Bottles, Device for securing corks in .....	C. Michel .....	208,193	Sept. 17, 1878	661	194	14	442
Bottles, jars, &c., Screw-cap for .....	A. Voegel .....	204,463	June 4, 1878	46	15	13	1019
Bottles, Labeling .....	E. L. Witte .....	204,272	May 28, 1878	1134	325	13	987
Bottles, Pliers for wiring .....	B. P. Kincaid .....	206,951	Aug. 13, 1878	314	96	14	249
Bottled liquors, Barrel for shipping .....	S. Strauss .....	204,259	May 28, 1878	1125	321	13	986
Bottling-machine attachment .....	H. Martin .....	203,748	May 14, 1878	551	156	13	992
Bottling-machines, Stopper-fastening attachment to .....	H. J. Wolf .....	199,888	Jan. 29, 1878	1217	357	13	221
Bowling-alley .....	H. J. Hellert, F. M. Müller, and C. A. Meyer .....	204,972	June 18, 1878	596	174	13	1068
Bowls, &c., Combined overflow and outlet connection for .....	W. E. Sherriffs .....	208,044	Sept. 17, 1878	509	151	14	422
Box:							
See Ash-box. Music-box.							
Axle-box. Packing-box.							
Ballot-box. Paper box.							
Berry-box. Post-office box.							
Blacking-box. Refrigerator-box.							
Cartridge-box. Service-box.							
Cigar-box. Shoe-box.							
Egg-box. Steam and fume box.							
Express-box. Spice-box.							
Fare-box. Spool-box.							
Fire-alarm signal-box. Stove-box.							
Fruit-box. Stuffing-box.							
Fuel-box. Telegraph-box.							
Gum-box. Wagon-box.							
Hat and bonnet box. Wine and oil box.							
Honey-box. Wood and sheet-metal box.							
Hop-picking box. Wooden box.							
Jewel-box. Work-box.							
Journal-box.							
Match-box.							
Box .....	H. C. Stone .....	199,876	Jan. 29, 1878	1205	354	13	219
Box .....	C. Tollner .....	205,772	July 9, 1878	347	100	14	56
Box and fastening .....	G. W. Bradley .....	207,642	Sept. 3, 1878	63	18	14	357
Box and globe, Combined .....	W. H. Topham .....	201,722	Mar. 26, 1878	947	290	13	570
Box and vase, Combined .....	W. A. Marble .....	201,116	Mar. 12, 1878	303	93	13	467
Box-fastener .....	B. S. Atwood .....	199,138	Jan. 15, 1878	444	131	13	85
Box-fastener .....	M. and R. J. Cooke .....	210,242	Nov. 26, 1878	789	234	14	797
Box-fastener .....	O. Geier .....	203,907	May 21, 1878	730	208	13	932
Box-fastener .....	R. Mead .....	205,286	June 25, 1878	929	276	13	1147
Box-loop .....	J. Walters .....	208,550	Oct. 1, 1878	92	27	14	501
Box-opener .....	J. H. Giese .....	208,590	Oct. 1, 1878	137	40	14	507
Box or carrier for bottled liquors .....	C. Conrad .....	210,240	Nov. 26, 1878	787	233	14	787
Box-planing machine .....	J. Mannebach .....	205,401	June 25, 1878	1052	312	13	1163
Box-trimming machine .....	J. Bozorth .....	205,994	July 16, 1878	600	173	14	94
Boxes and trays, Machine for manufacturing .....	S. H. Wright .....	208,661	Oct. 1, 1878	211	60	14	517
Boxes from veneer, Mold for forming .....	N. Waterbury .....	208,276	Sept. 24, 1878	769	225	14	458
Boxes, Manufacture of .....	H. C. Stone .....	199,327	Jan. 15, 1878	631	183	13	114
Brace:							
See Axle-brace. Shoulder-brace.							
Bit-brace. Thrashing-machine							
Broom-brace. brace.							
Ratchet-bit brace. Vehicle-spring brace.							
Bracelet .....	W. B. Carpenter .....	205,836	July 9, 1878	419	119	14	65
Bracelet .....	S. P. Cox .....	203,426	May 7, 1878	200	57	13	847
Bracelet .....	W. Durand .....	204,548	June 4, 1878	116	39	13	1029
Bracelet .....	L. Heckmann .....	210,119	Nov. 19, 1878	645	191	14	774
Bracelet-fastening .....	L. Van Praag .....	203,964	May 21, 1878	789	226	14	940
Bracelet-joint .....	F. E. Capron .....	201,092	Mar. 12, 1878	276	85	13	464
Bracelet, Spring .....	F. Young and E. C. Keer .....	209,847	Nov. 12, 1878	346	103	14	731
Bracket:							
See Book-shelf bracket. Shingling-bracket.							
Curtain-bracket. Show-bracket.							
Dental bracket. Suspension-bracket.							
Lamp-bracket.							
Bracket .....	J. Bright .....	209,325	Oct. 29, 1878	966	282	14	638
Bracket .....	W. Brodie and E. Comfort .....	205,722	July 9, 1878	294	86	14	49
Bracket .....	M. D. Jones .....	208,319	Sept. 24, 1878	811	237	14	464
Bracket .....	F. H. Robinson .....	199,167	Jan. 15, 1878	472	139	13	89
Bracket .....	R. B. Sanderson .....	200,767	Feb. 26, 1878	916	269	13	397
Bracket-rod .....	W. S. Blake .....	219,084	Nov. 19, 1878	607	18	14	769
Braid and similar articles in packages, Device for holding .....	S. B. Fleisher .....	207,114	Aug. 20, 1878	490	147	14	274
Braid, Card for holding and exhibiting .....	R. Taylor .....	210,577	Dec. 3, 1878	208	55	14	850
Braid, &c., Device for holding coils of .....	S. B. Fleisher .....	205,258	June 25, 1878	898	266	13	1143
Braid-holder .....	J. C. Lyon .....	204,495	June 4, 1878	71	25	13	1022
Braid, Star .....	A. Moll .....	205,567	July 2, 1878	110	32	14	23
Brake:							
See Air-brake. Safety-brake.							
Car-brake. Sled-brake.							
Elevator-brake. Sleigh-brake.							
Hemp and flax brake. Steam-brake.							
Horse-brake. Vacuum-brake.							
Railway-brake. Vehicle-brake.							
Railway-carriage brake. Wagon-brake.							
Brake-block holder .....	J. Leitzinger .....	199,726	Jan. 29, 1878	1067	312	13	198
Brake-rod attachment .....	D. C. Montgomery .....	210,549	Dec. 3, 1878	172	46	14	845



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				Spec.	Dr. &	Vol.	Page.
Brake-shoe	H. L. Perrino	203,405	May 7, 1878	272	78	13	858
Brake-shoe clamp	C. Heinen	208,092	Sept. 17, 1878	551	165	14	428
Bras-scourer	W. Harris	210,029	Nov. 10, 1878	548	164	14	761
Bras-scourer	A. H. Smith and S. S. Thompson	200,590	Nov. 5, 1878	56	17	14	688
Bras-scourer	R. Tyson	200,092	Oct. 15, 1878	703	204	14	534
Bras-treating	J. T. Shanton	208,642	Oct. 1, 1878	189	54	14	514
Bras-melting furnace	J. Fletcher	204,309	May 28, 1878	1173	334	13	692
Bread-cutter	C. W. Madsen	210,343	Nov. 26, 1878	900	263	14	811
Bread, meat, &c., Implement for cutting	L. Quigg	201,046	Mar. 5, 1878	226	71	13	450
Bread, Molding	A. E. Muth	203,363	May 7, 1878	134	89	13	838
Bread-strap roller	J. S. Nelson	210,349	Nov. 20, 1878	910	266	14	818
Bread-pin	W. McKnight	203,176	Apr. 30, 1878	1427	416	13	899
Brick and concrete-block press	A. F. Nagle	205,500	July 2, 1878	111	33	14	23
Brick and similar material used for metallurgic purposes, Treating fire.	A. R. Reynolds	210,963	Dec. 17, 1878	651	.....	14	925
Brick and tile kiln	N. B. Heafer	210,692	Dec. 10, 1878	336	92	14	876
Brick and tile machine	E. Durand	204,957	June 18, 1878	581	170	13	1096
Brick and tile machine	P. H. Kells	202,048	Apr. 30, 1878	1198	346	13	778
Brick and tile machine	J. C. McKenzie	203,284	May 7, 1878	50	15, 16	13	827
Brick-cleaning machine	J. Hyde and A. Barker	203,622	May 11, 1878	415	118	13	885
Brick-drying oven	M. P. Smith	208,766	Oct. 8, 1878	333	95, 96	14	540
Brick for annealing-furnaces, Fire	C. H. Morgan	208,483	Oct. 1, 1878	29	0	14	493
Brick for plastering purposes, Dovetail-grooved	W. J. Mackrell	208,186	Sept. 17, 1878	657	193	14	441
Brick-kiln	S. J. Allen	209,443	Oct. 29, 1878	1088	317	14	636
Brick-kiln	A. F. Andrews	204,182	May 28, 1878	1040	297 } 298 }	13	975
Brick-kiln	E. W. Bingham	204,651	June 11, 1878	234	74	13	1049
Brick-kiln	J. Haas	202,542	Apr. 16, 1878	744	215	13	709
Brick-kiln	J. Kingsbury	207,875	Sept. 10, 1878	314	95	14	362
Brick-kiln	S. W. Underhill	202,489	Apr. 16, 1878	670	196	13	702
Brick-kiln furnace	J. Franz and J. C. Stevens	205,851	July 9, 1878	432	123	14	67
Brick-kiln roof	T. F. Adams	202,212	Apr. 9, 1878	376	110	13	656
Brick-machine	J. E. Allen and P. F. Duffy	205,602	July 2, 1878	141	43	14	7
Brick-machine	C. S. Bigler	210,903	Dec. 17, 1878	588	162	14	917
Brick-machine	J. K. Caldwell	206,771	Aug. 6, 1878	117	37	14	221
Brick-machine	C. Chambers, jr.	207,343	Aug. 27, 1878	736	220 } 221 } 153 }	14	311
Brick-machine	W. T. Duvall	202,336	Apr. 16, 1878	522	154 }	13	681
Brick-machine	J. A. Gamewell	201,515	Mar. 19, 1878	725	220 } 221 }	13	535
Brick-machine	E. R. and W. E. Gard	202,537	Apr. 16, 1878	735	212 } 213 }	13	708
Brick-machine	W. H. Kain	199,072	Jan. 8, 1878	358	106	13	72
Brick-machine	L. B. Kennedy	206,247	July 23, 1878	890	254	14	133
Brick-machine	I. Morley	203,756	May 14, 1878	557	158	13	903
Brick-machine	I. Morley	208,410	Sept. 24, 1878	908	266	14	477
Brick-machine	W. O. Nightengale	203,188	Apr. 30, 1878	1437	420	13	810
Brick-machine	H. D. Phillips and C. H. Williams	202,801	Apr. 23, 1878	1095	814	13	762
Brick-machine	H. C. Sargeant	199,472	Jan. 22, 1878	780	229	13	146
Brick-machine	S. Shreffler, jr.	204,688	June 11, 1878	273	84, 85	13	1054
Brick, Machine for making and pressing	J. K. Caldwell	208,566	Oct. 1, 1878	114	33	14	504
Brick-making machinery	W. Mendham	207,203	Aug. 20, 1878	672	200	14	296
Brick-mold	J. L. Dunough	210,507	Dec. 8, 1878	122	32	14	839
Brick-press	A. A. Moore	203,755	May 14, 1878	556	157	13	902
Brick surfaces, Wash for covering	F. W. Bartlett and C. Ward	200,498	Feb. 19, 1878	625	.....	13	245
Bricks and tiles, Manufacture of	M. Poletti	200,920	Nov. 12, 1878	414	124 } 125 }	14	740
Bridge-eyes, Machine for making	A. Schwelerochner	204,381	May 28, 1878	1249	356	13	1001
Bridge gate, Draw	H. Hoenschell	200,790	Aug. 6, 1878	140	43	14	224
Bridge gate, Draw	W. A. and H. Pringle	203,370	May 7, 1878	141	41	13	830
Bridge gate, Draw	P. Schaefer	203,296	May 7, 1878	64	20	13	829
Bridge gate, Draw	P. B. Wight	201,316	Mar. 12, 1878	513	157	13	497
Bridge, Self-adjusting	B. Williams	204,407	May 28, 1878	1274	363 } 364 }	13	1004
Bridge, Truss	S. Conklin	210,754	Dec. 10, 1878	402	110	14	884
Bridge, Truss	G. W. Cooley	208,155	Sept. 17, 1878	620	183	14	437
Bridge, Truss	W. O. Douglas	202,526	Apr. 16, 1878	707	206	13	706
Bridge, Truss	W. Ireland	205,799	July 9, 1878	379	109	14	60
Bridges, Barrier for draw	A. R. Sherman	206,046	July 10, 1878	648	188	14	100
Bridges, &c., Eye-bar for	M. H. Alberger	201,860	Apr. 2, 1878	1	1	13	599
Bridges, Testing	L. Laubscher	210,864	Dec. 17, 1878	528	149	14	910
Bridle and halter	J. McKibben	203,929	May 21, 1878	749	216	13	935
Bridle and halter, Combined	E. Cox	203,324	May 7, 1878	95	27	13	822
Bridle and halter, Combined	R. E. Whitman	207,407	Aug. 27, 1878	860	256	14	327
Bridle attachment	T. P. Clines	199,031	Jan. 8, 1878	320	94	12	65
Bridle-bit	E. N. Crane	203,001	Apr. 30, 1878	1247	361	13	785
Bridle-bit	W. S. Mitchell	209,911	Nov. 12, 1878	405	121 } 122 }	14	739
Bridle-bit	J. Stanley	201,566	Mar. 19, 1878	781	238	13	542
Bridle-bits, Manufacture of	F. Crane	203,002	Apr. 30, 1878	1248	361	13	785
Bridle-rossette	N. LeBlond	202,111	Apr. 9, 1878	269	79	13	642
Bridle, Safety	D. Lauster	201,801	Mar. 26, 1878	1027	814	13	582
Bridle safety attachment	T. E. Clark	202,522	Apr. 16, 1878	703	205	13	706
Bridles, Brow-band for	E. R. Cahoon	209,651	Nov. 5, 1878	129	37	14	698
Bristles, Machine for trimming	A. W. Moore	206,400	July 30, 1878	1090	812	14	163
Broiler	J. B. Geyser	199,822	Jan. 29, 1878	1159	340	13	213
Broiler, Meat	J. McConnell	200,022	Feb. 26, 1878	767	226	13	375
Broiling-chamber	E. Norton	204,991	June 18, 1878	616	180	13	1100
Bronzing and flocking paper, cotton, linen, &c	R. E. Peterson and E. J. Frost	200,025	Nov. 5, 1878	96	.....	14	694
Bronzing-machine	J. T. Ashley	208,358	Sept. 24, 1878	849	248	14	469
Bronzing-machine	J. O. Kurtzmann	203,841	May 21, 1878	658	187	13	922
Bronzing-machine	R. E. Peterson and E. J. Frost	209,624	Nov. 5, 1878	95	28	14	690
Brooch-fastening	A. Zierleyn	208,875	Oct. 8, 1878	455	131	14	557
Brooch-pin	J. Jenkins	204,047	May 21, 1878	876	251	13	950

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Broom	J. Arbeiter	207, 837	Sept. 10, 1878	271	84	14	386
Broom	M. L. Baxter	206, 294	July 23, 1878	940	268	14	141
Broom	J. W. Booth	205, 344	June 25, 1878	990	295	13	1155
Broom	M. T. Boult	209, 017	Oct. 15, 1878	621	180	14	583
Broom	J. Lay	208, 085	Oct. 8, 1878	249	71	14	530
Broom	W. Walter	207, 464	Aug. 27, 1878	864	255	14	326
Broom-binder	J. W. Cliff	199, 412	Jan. 22, 1878	725	213	13	137
Broom-binding device	G. Pirrung	206, 823	Aug. 6, 1878	108	53	14	227
Broom-brace	C. H. Butler	201, 496	Mar. 19, 1878	705	215	13	532
Broom-handle	P. Lamboy	207, 427	Aug. 27, 1878	823	244	14	322
Broom-handles, Machine for varnishing	H. Bradt	203, 583	May 14, 1878	383	108	13	881
Broom-holder	J. D. Leach	209, 484	Oct. 29, 1878	1130	330	14	602
Broom-press	D. Bard	207, 839	Sept. 10, 1878	272	84	14	387
Broom-rack	J. Terrass	204, 511	June 4, 1878	84	29	13	1024
Brooms, &c., Handle-extension attachment for	R. G. Knox	209, 203	Feb. 12, 1878	320	96	13	201
Brush	T. J. Connell	209, 434	Feb. 19, 1878	564	166	13	336
Brush	S. Crane	207, 256	Aug. 20, 1878	636	190	14	203
Brush	T. Dillon	207, 256	Aug. 20, 1878	480	146	14	274
Brush	A. C. Estabrook	208, 898	Oct. 15, 1878	469	141	14	565
Brush	B. C. Frobiasher	203, 256	May 7, 1878	20	7	13	823
Brush	F. W. Geaswein	209, 967	Nov. 10, 1878	481	145	14	752
Brush	M. Leiner	201, 688	Mar. 26, 1878	913	279	14	565
Brush	A. Schuck, jr.	201, 708	Mar. 20, 1878	932	286	13	608
Brush	C. H. Stratton	210, 166	Nov. 19, 1878	034	207	14	781
Brush	C. J. Walker and J. A. Horton	205, 774	July 9, 1878	340	101	14	50
Brush and blacking-box holder	W. H. Andrus	207, 704	Sept. 3, 1878	122	38	14	364
Brush and broom holder	D. M. Spalding	203, 208	Apr. 30, 1878	1400	427	13	813
Brush, Automatic fly	J. P. Kelso	203, 462	May 7, 1878	239	68	13	853
Brush, Blacking	R. C. Doane	207, 953	Sept. 10, 1878	306	120	14	402
Brush-blocks, Machine for boring	C. A. Mahle	210, 866	Dec. 17, 1878	530	150	14	910
Brush-blocks, Machine for boring	A. Nawadny	205, 497	July 2, 1878	34	11	14	13
Brush-blocks, Machine for boring	A. Nawadny	209, 828	Nov. 12, 1878	324	96	14	728
Brush-bridle	C. Breckh	204, 652	June 11, 1878	236	74	13	1049
Brush-bridle	W. H. G. Savage	201, 203	Mar. 12, 1878	383	118	13	480
Brush-bridle, Paint	M. W. Marsden	209, 279	Oct. 22, 1878	910	265	14	627
Brush, Dust	E. C. Patterson	202, 045	Apr. 2, 1878	186	54	13	625
Brush for cleaning boiler-flues	C. C. Miller	202, 361	Apr. 16, 1878	548	160	13	684
Brush for scrubbing, Wooden	G. W. Lee	200, 736	Feb. 26, 1878	890	201	13	392
Brush, Hair	D. B. Lovejoy	203, 283	May 7, 1878	40	15	13	827
Brush, Horse	F. Foss	205, 374	June 25, 1878	1025	303	13	1159
Brush-machine	E. B. Whiting	204, 642	June 4, 1878	218	69	13	1043
Brush, Paint	J. S. Gilligan	203, 250	May 7, 1878	24	8	13	824
Brush, Painter's	J. W. Howard	199, 205	Jan. 15, 1878	510	150	13	90
Brush, Scrubbing	J. M. Wilkinson	198, 828	Jan. 1, 1878	107	30	13	25
Brush, Shaving	A. Hopfen	206, 791	Aug. 6, 1878	141	43	14	224
Brush, Shoe	F. H. Kean	203, 050	Apr. 30, 1878	1295	376	13	701
Brushes, Making	J. L. Whiting	207, 786	Sept. 3, 1878	206	63	14	375
Brushes, Manufacture of	C. L. W. Baker	207, 793	Sept. 10, 1878	225	71	14	481
Bucket, Dinner	G. Kenahaw	200, 343	Feb. 12, 1878	463	137	13	312
Bucket ear, Well	B. F. Felix	202, 938	Apr. 30, 1878	1188	343	13	777
Bucket, Metal	M. Campbell	205, 242	June 25, 1878	885	262	13	1141
Bucket, Sap	A. E. Ware	205, 592	July 2, 1878	132	40	14	26
Buckle	W. Bray, jr.	200, 501	Feb. 19, 1878	627	184	13	346
Buckle	W. J. Carnes, jr.	201, 093	Mar. 12, 1878	277	86	13	464
Buckle	J. B. Gathright	202, 644	Apr. 23, 1878	870	249	13	734
Buckle	G. P. Goff	208, 306	Sept. 24, 1878	798	233	14	462
Buckle	R. J. S. Graham	203, 029	Apr. 30, 1878	1277	369	13	789
Buckle	C. Hersome	206, 785	Aug. 6, 1878	134	42	14	223
Buckle	G. W. Hotchkiss and J. A. Clinton	199, 688	Jan. 8, 1878	354	104	13	71
Buckle	J. H. Huntress	206, 179	July 23, 1878	814	232	14	124
Buckle	G. R. Kelsey	205, 870	July 9, 1878	453	129	14	70
Buckle	A. E. McConnell	200, 466	Feb. 19, 1878	595	175	13	341
Buckle	G. W. McGill	200, 887	Mar. 5, 1878	53	19	13	423
Buckle	G. W. McGill	209, 701	Nov. 5, 1878	179	53	14	705
Buckle	W. F. Osborne	199, 856	Jan. 29, 1878	1188	349	13	217
Buckle	E. S. Smith	199, 586	Jan. 22, 1878	902	264	13	165
Buckle	L. Wilson	207, 787	Sept. 3, 1878	207	63	14	375
Buckle and loop fastening	G. L. Crandal	206, 298	July 23, 1878	949	269	14	141
Buckle, Elastic	E. S. Wardwell	208, 443	Sept. 24, 1878	938	275	14	480
Buckle for shoes, gloves, &c.	A. Makolczyk	199, 216	Jan. 15, 1878	519	153	13	97
Buckle guard, Harness	T. P. Kemp	198, 946	Jan. 8, 1878	237	67	13	52
Buckle, Harness	V. M. Beamer	207, 478	Aug. 27, 1878	876	258	14	328
Buckle, Harness	S. M. Hamilton	206, 501	July 30, 1878	1259	362	14	184
Buckle loop and fastener for carriage-tops, harness, &c.	J. Watters	202, 683	Apr. 23, 1878	910	260	13	738
Buckle, Suspender	G. W. McGill	202, 039	Apr. 2, 1878	180	52	13	624
Buckle-tongue cover for harness	M. R. Dowlin	209, 469	Oct. 29, 1878	1114	325	14	659
Buckle-tongues, Manufacturing	W. F. Osborne	207, 709	Sept. 3, 1878	188	57	14	373
Buckle, Trace	A. G. Landon and B. Becker	204, 342	May 28, 1878	1209	344	13	996
Buckle, Trace	E. G. Latta	205, 715	July 2, 1878	267	79	14	42
Buckle, Trace	A. Orser	206, 191	July 23, 1878	828	236	14	126
Buckle, Trace and pad	G. E. Bales	204, 940	June 18, 1878	566	165	13	1094
Bag-extermiator	S. Ruggles	203, 072	Apr. 30, 1878	1316	382	13	794
Buggy-top	W. H. Hopkins and M. L. Stebbins	199, 829	Jan. 29, 1878	1165	342	13	214
Buggy-top, Adjustable	I. Z. Merriam	200, 797	Feb. 26, 1878	945	278 } 279	13	401
Building, Agricultural	I. J. Hesse	203, 452	May 7, 1878	230	65	13	852
Buildings, Facing for	G. B. Field	200, 039	Feb. 5, 1878	146	47, 48	13	256
Buildings, Metallic siding for	M. H. Crittenden	209, 829	Oct. 29, 1878	970	283	14	638
Bull-wheel for artesian wells	M. B. McManus	204, 501	June 4, 1878	162	53	13	1036
Bullet-machine	S. L. Loomis	209, 619	Nov. 5, 1878	91	26, 27	14	693
Bullion, Machine for covering strands for making	R. C. Alton	202, 774	Apr. 23, 1878	1001	288	13	750
Bullion, Refining base	L. Balbach	207, 837	Sept. 10, 1878	383		14	400
Buoy	G. D. Wyckoff	203, 399	May 7, 1878	170	49	13	844

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				Spec.	Dr. g.	Vol.	Page.
Buoy, Safety .....	J. E. Jouett and W. B. Hoff .....	205,751	July 9, 1878	325	94	14	53
Bung .....	W. Bender .....	206,923	Aug. 13, 1878	290	88	14	246
Bung .....	G. Borst .....	203,316	May 7, 1878	87	25	13	832
Bung .....	J. Kirby .....	203,740	May 14, 1878	540	153	13	900
Bung .....	H. Müller .....	204,595	June 4, 1878	168	54	13	1036
Bung .....	A. Schneider .....	206,265	July 23, 1878	911	259	14	136
Bung .....	W. J. Stevens .....	208,499	Oct. 1, 1878	45	14	14	495
Bung and bush .....	J. Blair .....	201,491	Mar. 19, 1878	700	214	13	531
Bung and bushing .....	P. K. O'Lally .....	202,284	Apr. 9, 1878	450	132	13	666
Bung and tap-bushing .....	G. W. Bert .....	205,783	July 9, 1878	362	104	14	58
Bung-bush .....	H. H. Mixer .....	205,494	July 2, 1878	31	10	14	13
Bung-fastener .....	E. Cole .....	202,996	Apr. 30, 1878	1243	359	13	785
Bung for casks .....	A. Zoller .....	210,590	Dec. 3, 1878	220	58	14	852
Bung-lock .....	J. Kirby .....	205,873	July 9, 1878	456	130	14	70
Bung-stave lock .....	J. Kirby .....	203,922	May 21, 1878	743	214	13	934
Bung-turning machine .....	R. Pentlarge .....	201,285	Mar. 12, 1878	474	145	13	492
Bung, Ventilating .....	J. Bersch .....	203,580	May 14, 1878	381	108	13	880
Bung-wrench .....	G. W. Phillips .....	203,496	May 7, 1878	272	78	13	854
Burglar-alarm .....	A. Beck .....	201,382	Mar. 19, 1878	592	182	13	516
Burglar-alarm .....	P. F. L. Burstall .....	206,225	July 23, 1878	866	247	14	131
Burglar-alarm .....	G. F. Busby .....	200,372	Feb. 19, 1878	505	149	13	327
Burglar-alarm .....	H. F. Crawford .....	199,034	Jan. 8, 1878	322	95	13	66
Burglar-alarm .....	G. W. Eddy .....	202,798	Apr. 23, 1878	1025	294	13	753
Burglar-alarm .....	H. Hart .....	201,008	Mar. 5, 1878	186	59	13	444
Burglar-alarm .....	J. Johnston .....	208,177	Sept. 17, 1878	648	190	14	440
Burglar-alarm .....	S. D. Lauffer .....	199,984	Feb. 5, 1878	93	30	13	247
Burglar-alarm .....	A. L. Linn .....	202,447	Apr. 16, 1878	634	185	13	694
Burglar-alarm .....	T. Powell .....	205,679	July 2, 1878	232	68, 69	14	33
Burglar-alarm .....	A. Rindgo .....	201,836	Mar. 26, 1878	1063	324	13	587
Burglar-alarm .....	A. E. Taylor and J. R. Johnson .....	204,861	June 11, 1878	458	134	12	1076
Burglar-alarm .....	J. W. and W. W. Wharf .....	205,454	June 25, 1878	1102	326	13	1169
Burglar-alarm and indicator, Combined .....	C. E. Hart and T. Johnson .....	206,105	July 16, 1878	708	204	14	107
Burglar-alarm, Electro-magnetic .....	C. H. Carter .....	202,630	Apr. 23, 1878	851	245	13	732
Burglar-alarm, Electro-magnetic .....	M. Kolosus .....	206,182	July 23, 1878	817	233	14	124
Burial apparatus .....	J. Patterson and N. Wheeler .....	204,366	May 28, 1878	1235	351	13	909
Burial-case .....	L. K. Dutton .....	202,797	Apr. 23, 1878	1024	294	13	753
Burial-case, Metallic .....	M. M. and G. Hersman .....	199,708	Jan. 29, 1878	1051	307	13	196
Burial-cases, End for .....	S. Benton .....	199,495	Jan. 22, 1878	893	235	13	149
Burial-casket .....	W. Hamilton .....	204,320	May 28, 1878	1186	337	13	903
Burial-casket .....	J. Homrighous .....	202,440	Apr. 16, 1878	626	183	13	605
Burial-casket .....	O. M. Johnston .....	205,555	July 2, 1878	90	28	14	21
Burial-casket .....	G. A. Kirchner .....	205,277	June 25, 1878	916	272	13	1145
Burial-casket .....	J. Maxwell .....	208,023	Sept. 17, 1878	480	145	14	419
Burial-casket .....	W. J. Noble .....	208,329	Sept. 24, 1878	821	240	14	405
Burial-casket .....	A. Van Bibber .....	207,570	Aug. 27, 1878	979	288	14	341
Burner-globes, Metallic top for .....	A. Combs .....	206,539	July 30, 1878	1234	355	14	189
Burner, Vapor .....	J. Bowers .....	210,488	Dec. 3, 1878	99	25	14	837
Burner, Vapor .....	W. Breslan .....	209,855	Nov. 12, 1878	353	105	14	732
Burner, Vapor .....	R. F. Danforth .....	207,258	Aug. 20, 1878	637	190	14	293
Burner, Vapor .....	W. R. Hanks .....	206,015	July 16, 1878	618	173	14	96
Burner, Vapor .....	E. F. Reed .....	205,505	July 2, 1878	43	13	14	14
Burner, Vapor .....	F. A. Sawyer .....	201,705	Mar. 26, 1878	930	285	13	563
Burner, Vapor .....	F. H. Shepherd .....	200,484	Feb. 19, 1878	612	180	13	243
Burner, Vapor .....	C. G. Spengler .....	202,066	Apr. 2, 1878	204	60	13	623
Burning hydrocarbon, Apparatus for .....	S. C. Salisbury .....	205,143	June 18, 1878	765	226 227	13	1120
Burning-machine .....	F. G. Sargent .....	210,565	Dec. 3, 1878	193	51	14	843
Burnishing-machine .....	J. Stever .....	199,592	Jan. 22, 1878	907	265 266	13	166
Bush-inserter .....	G. H. Mixer .....	209,353	Oct. 29, 1878	998	290	14	642
Bustle and pannier .....	S. Dixon .....	200,647	Feb. 26, 1878	795	234	13	379
Butter, Apparatus for tempering cream preparatory to making .....	E. Norris .....	205,893	July 9, 1878	477	136	14	73
Butter-can .....	G. W. Simpson .....	205,309	June 25, 1878	956	283	13	1150
Butter-cutter .....	I. M. Rhodes .....	208,424	Sept. 24, 1878	921	270	14	473
Butter-mold .....	H. A. Rees .....	202,120	Apr. 9, 1878	280	82	13	643
Butter-package .....	D. C. Hill .....	207,417	Aug. 27, 1878	815	241	14	321
Butter-package .....	C. H. Robison .....	209,136	Oct. 22, 1878	771	224	14	603
Butter-package .....	C. L. Sabin .....	208,695	Oct. 8, 1878	258	74	14	531
Butter-packages, &c., Cover for .....	G. J. Record .....	206,261	July 23, 1878	908	258	14	138
Butter-press .....	N. S. Long .....	205,109	June 18, 1878	730	217	13	1116
Butter-pressing apparatus .....	J. Harlan .....	200,392	Feb. 19, 1878	524	54	13	329
Butter shaper .....	W. H. and T. Dulaney .....	199,697	Jan. 29, 1878	1042	304	13	194
Butter-tray .....	W. M. Ferris, Jr. ....	199,279	Jan. 15, 1878	581	170	13	106
Butter-tub .....	R. Stitt .....	205,436	June 25, 1878	1084	321	13	1167
Butter-tub .....	L. Stone .....	206,051	July 16, 1878	655	190	14	101
Butter-tub .....	I. and J. Westcott .....	205,453	June 25, 1878	1101	326	13	1169
Butter-tub fastening .....	J. Gilberts and C. S. Jackson .....	203,135	Apr. 30, 1878	1380	401	13	803
Butter-worker .....	F. G. Butler .....	202,516	Apr. 16, 1878	696	204	13	705
Butter-worker .....	H. I. Carver .....	203,533	May 14, 1878	333	95	13	874
Butter-worker .....	P. B. Howell and E. Cole .....	207,742	Sept. 3, 1878	161	49	14	369
Butter-worker .....	T. Muir .....	206,036	July 16, 1878	639	185	14	99
Butter-worker .....	W. Sweet .....	202,481	Apr. 16, 1878	663	194	13	701
Button .....	C. E. Bates .....	207,706	Sept. 3, 1878	123	38	14	365
Button .....	C. E. Bates .....	209,320	Oct. 29, 1878	961	280	14	637
Button .....	C. B. Chaffee .....	202,789	Apr. 23, 1878	1016	292	13	752
Button .....	F. E. Comey .....	206,931	Aug. 13, 1878	297	91	14	247
Button .....	S. Cottle .....	202,412	Apr. 16, 1878	596	175	13	691
Button .....	W. Empson and J. Brant .....	209,965	Nov. 19, 1878	480	145	14	753
Button .....	W. T. Fane .....	200,824	Mar. 5, 1878	10	3	13	416
Button .....	A. S. Fernald .....	203,022	Apr. 30, 1878	1271	368	13	783
Button .....	A. S. Fernald .....	210,194	Nov. 26, 1878	739	219	14	791
Button .....	M. Lowenstein .....	211,028	Dec. 17, 1878	734	201	14	934
Button .....	E. W. McGlaulin .....	200,554	Feb. 19, 1878	682	200	13	354
Button .....	A. Messler .....	201,268	Mar. 12, 1878	456	140	13	489

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Button	A. Michelson	208,752	Oct. 8, 1878	318	91	14	539
Button, &c.	W. A. L. Miller	199,850	Jan. 29, 1878	1185	347	13	216
Button	C. H. Mumford	206,037	July 16, 1878	639	185	14	90
Button	N. C. Newell	206,348	July 23, 1878	1015	290	14	149
Button	D. B. Waite	204,114	May 21, 1878	948	272	13	959
Button	W. West and W. F. Spittle	202,684	Apr. 23, 1878	911	260	13	738
Button	E. S. and J. E. Wheeler	202,907	Apr. 23, 1878	1146	329	13	767
Button	E. S. and J. E. Wheeler	204,866	June 11, 1878	468	136	13	1077
Button and fastener, Combined	A. M. Richmond	209,135	Oct. 22, 1878	771	224	14	608
Button and stud	C. E. S. Gederén	206,103	July 16, 1878	706	204	14	107
Button and stud	J. W. and I. M. Miller	206,471	July 30, 1878	1164	334	14	172
Button and stud	M. Ransom	206,687	Aug. 6, 1878	34	10	14	211
Button and stud	J. A. Rupert	206,487	July 30, 1878	1184	340	14	174
Button and stud	J. Wall and J. Newman	208,442	Sept. 24, 1878	937	275	14	480
Button and stud, Collar and sleeve	P. S. Eddy and O. P. Coggeshall	201,600	Mar. 26, 1878	833	253	13	533
Button, Collar and sleeve	W. P. Dolloff	210,017	Nov. 19, 1878	537	161	14	760
Button, Collar and sleeve	G. B. Fittz	210,110	Nov. 19, 1878	635	188	14	773
Button-fastener	H. Burtley	200,091	Feb. 26, 1878	842	248	13	385
Button-fastener	A. Michelson	208,753	Oct. 8, 1878	319	91	14	539
Button-fastener	G. W. Prentice	207,818	Sept. 10, 1878	248	78	14	384
Button-fastening	C. E. Bates	200,018	Feb. 5, 1878	122	40	13	252
Button-fastening	G. B. Fittz	205,071	June 18, 1878	694	205	13	1111
Button-fastening	C. M. Platt	203,497	May 7, 1878	273	78	13	858
Button-hole cutter	F. C. Leyboldt	202,446	Apr. 16, 1878	633	185	13	096
Button-hole cutter	A. J. Lytle	201,432	Mar. 19, 1878	644	196	13	523
Button-hole linings, Machine for making	D. Harris	205,080	June 18, 1878	702	208 209	13	1112
Button-hook	J. A. Smith	208,858	Oct. 8, 1878	438	116	14	555
Button-hook	L. C. West	210,228	Nov. 26, 1878	774	229	14	795
Button-lacing	G. W. Prentice	201,445	Mar. 19, 1878	655	200	13	524
Button link, Sleeve	C. Hein	203,618	May 14, 1878	412	117	13	884
Button or stud fastening	R. Bousard	200,023	Feb. 5, 1878	127	42	13	253
Button-polishing machine	W. F. Niles	202,369	Apr. 16, 1878	556	163	13	685
Button-polishing machine	W. F. Niles	207,889	Sept. 10, 1878	329	100	14	394
Button, Shoe	Q. M. Youngs and A. E. Mathews	209,370	Oct. 29, 1878	1017	295	14	645
Button, Sleeve	L. Barre	210,397	Dec. 3, 1878	7	2	14	825
Button, Sleeve	W. Bourke	204,706	June 11, 1878	292	91	13	1057
Button, Sleeve	J. M. Chandler	206,002	July 16, 1878	607	175	14	95
Button, Sleeve or collar	C. A. Wood	203,308	May 7, 1878	79	24	13	831
Button-staples to shoes, &c., Apparatus for applying	A. Wisner	201,858	Mar. 26, 1878	1086	330	13	590
Buttons and other articles from vegetable ivory, &c., Manufacture of	W. J. Lewis	210,617	Dec. 10, 1878	260		14	866
Buttons, Fastening-plate for shoe	G. Conover	200,978	Mar. 5, 1878	154	50	13	439
Buttons, Machine for making metal	N. C. Smith	201,843	Mar. 26, 1878	1070	325 326	13	588
Buttoner	J. Hill	202,943	Apr. 30, 1878	1194	345	13	778
Buttoner	G. D. Stevens	208,435	Sept. 24, 1878	932	273	14	479
Buttoner and button-fastener combined	L. H. Parker	205,207	June 25, 1878	846	251	13	1136
C.							
Cables, Machine for making wire	H. B. Scutt and H. S. Smith	204,686	June 11, 1878	270	84	13	1054
Caddy	E. Norton	207,544	Aug. 27, 1878	954	279	14	338
Caddy, Measuring	J. C. Reed	199,933	Feb. 5, 1878	45	15	13	240
Cake-cutter	J. Whitehead	200,958	Mar. 5, 1878	133	44	13	436
Cake-cutter and nutmeg-grater combined	H. M. Avers	203,312	May 7, 1878	84	24	13	831
Cake-cutting machine	J. F. S. Smith	209,365	Oct. 29, 1878	1011	294	14	644
Cake holder and cooler	S. W. Larrabee	201,538	Mar. 19, 1878	751	229	13	538
Cake machine, Soft	E. A. Coles	210,839	Dec. 17, 1878	495	140 141	14	906
Calceining-machine	A. Brooks	208,366	Sept. 24, 1878	859	250	14	470
Calceining, Size for	W. S. Welch	199,242	Jan. 15, 1878	541		13	100
Calculating-machine	W. W. Hopkins	203,151	Apr. 30, 1878	1398	408	13	805
Calculating-machine	W. Odhner	209,416	Oct. 29, 1878	1057	308	14	651
Calculating-machine	C. E. Patterson	203,763	May 14, 1878	564	159	13	903
Calculating-machine	R. Veree	207,918	Sept. 10, 1878	359	109 110	14	398
Calculating percentage, &c., Device for	J. L. Knight	199,721	Jan. 29, 1878	1061	310	13	197
Calculator	J. I. Bogue	207,487	Aug. 27, 1878	889	262	14	330
Calculator	W. Hart	199,289	Jan. 15, 1878	591	173	13	108
Calendar	H. Meineke	209,577	Nov. 5, 1878	43	12	14	686
Calendar	W. W. Watson	199,764	Jan. 29, 1878	1101	323	13	204
Calendar and clock combined	J. W. Collins	199,796	Jan. 29, 1878	1135	333	13	209
Calendar and pen-rack	C. Schmidt	201,840	Mar. 26, 1878	1068	325	13	588
Calendar, dial, and watch-crystal, Combined	D. S. Kendrick	208,182	Sept. 17, 1878	653	192	14	441
Calendar, Perpetual time and interest	J. Kachelman, Jr.	201,617	Mar. 26, 1878	849	258	13	555
Calipers	A. Schmitter	207,308	Aug. 20, 1878	686	204	14	290
Calipers	H. C. Wight	205,225	June 25, 1878	866	256	13	1139
Camera							
See Photographic camera.							
Camera	S. L. Bergstresser	210,445	Dec. 3, 1878	59	14	14	831
Camera	J. W. T. Cadett	208,956	Oct. 15, 1878	556	162	14	574
Camera-shutter	A. Johnson	203,344	May 7, 1878	112	33	13	835
Can							
See Butter-can.	Milk-can.						
Cotton-can.	Oil-can.						
Fish, bait, and oyster can.	Oyster-shiping can.						
Jacket-can.	Paint-can.						
Liquid-can.	Pickle-can.						
Measuring-can.	Refrigerating transportation-can.						
Meat-can.	Sealed can.						
Metal can.	Tin can.						
Metallic can.	Water-can.						
Can	J. W. Masury	207,191	Aug. 20, 1878	567	170	14	284



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Can	E. Norton	209,070	Oct. 15, 1878	683	197	14	591
Can-filling machine	V. Barker	203,313	May 7, 1878	84	25	13	531
Can-labeling machine	S. L. Salomon, C. F. Knoch, and G. A. Semel	203,200	Apr. 30, 1878	1452	424	13	512
Can-lids, Locking device for	W. E. Jenkins	206,879	Aug. 13, 1878	244	77	14	241
Can-opener	J. G. Wiggins	211,073	Dec. 17, 1878	789	217	14	940
Can-opener	C. M. Williams	198,959	Jan. 8, 1878	249	71	13	54
Can-opener	C. M. Williams	269,535	Oct. 29, 1878	1189	345	14	670
Can-supporting case	G. H. Perkins and G. Brown	211,041	Dec. 17, 1878	756	207	14	966
Can waxing or soldering apparatus	T. Bown	199,406	Jan. 22, 1878	720	212	13	136
Cans, Apparatus for hermetically sealing	T. Trezise	203,796	May 14, 1878	600	168	13	967
Cans, Attachment for securing caps or covers to	D. Parks	267,131	Aug. 20, 1878	507	153	14	277
Cans, Casing for	A. F. Tripp	200,806	Feb. 26, 1878	954	281	13	403
Cans, Machine for applying flux to	G. H. Perkins	203,073	Apr. 30, 1878	1317	383	13	704
Cans, &c., with liquids, Machine for filling	W. H. Brock	204,477	June 4, 1878	58	19, 20	13	1021
Canal-boat and bargo	J. A. Preston	208,334	Sept. 24, 1878	827	242	14	466
Canceling and registering letters and postal cards, Machine for	W. H. Lytle and R. Crocker	205,802	July 9, 1878	382	110	14	61
Candle, Electric	L. R. Longworth	203,844	May 21, 1878	662	188	13	923
Candle-holder	F. Galster	202,242	Apr. 16, 1878	531	155	13	682
Candle-holder, match-safe, and nail-file combined	S. Fuld	201,919	Apr. 2, 1878	61	16	13	667
Candlestick	L. Leonard	210,790	Dec. 10, 1878	438	122	14	800
Candlestick	J. McCarthy	200,661	Feb. 26, 1878	812	239	13	351
Candlestick	J. Musgrove	199,094	Jan. 8, 1878	380	113	13	76
Candlestick	T. H. Shahan	205,915	July 9, 1878	503	143	14	76
Candlestick	W. Young	205,599	July 2, 1878	137	41	14	27
Candlestick and match-safe, Combined	G. E. Heinig	209,565	Nov. 5, 1878	33	9	14	685
Cane	G. P. Clarke	202,094	Apr. 9, 1878	251	74	13	639
Cane	L. W. Rood	203,559	May 14, 1878	362	102	13	878
Cane and seat, Combined	J. W. Smith	208,428	Sept. 24, 1878	927	271	14	479
Cane-juice, Apparatus for defecating	W. H. Pilant	210,556	Dec. 3, 1878	178	48	14	846
Cane-mill	J. S. Schofield	206,622	July 30, 1878	1321	380	14	191
Cane-shaving machine	C. L. Jones, J. W. Smith, and H. H. Adams	210,945	Dec. 17, 1878	633	175	14	822
Canister:							
See Shot-canister.							
Canister	W. Gardner	202,017	Apr. 2, 1878	153	45	13	621
Cannon, Breech-loading	A. H. Emery	203,020	Apr. 30, 1878	1270	367	13	758
Cannon-powder	T. T. S. Laidley	199,723	Jan. 29, 1878	1064	311	13	196
Canopy, Face	M. Bourke	210,907	Dec. 17, 1878	593	163	14	917
Can't-dog	E. Broad	205,523	July 2, 1878	62	18	14	17
Canvas, Manufacture of artists'	W. Levin	206,885	Aug. 13, 1878	248		14	241
Canvas, Painters'	W. Levin	206,886	Aug. 13, 1878	250		14	241
Canvas-stretcher	E. H. Collins	202,330	Apr. 16, 1878	518	152	13	680
Caoutchouc or kerite, Manufacture of artificial	A. G. Day	210,411	Dec. 3, 1878	22		14	827
Cap and collar combined	M. Isador	202,262	Apr. 9, 1878	427	125	13	685
Cap-extractor	G. W. Hadley	201,774	Mar. 26, 1878	1004	306	13	579
Capsules, Apparatus for filling and capping	T. Whitfield	210,589	Dec. 3, 1878	219	58	14	852
Car and coach heater, Railway	C. C. Newton	205,570	July 2, 1878	116	34	14	23
Car-axle	R. N. Allen	206,291	July 23, 1878	944	267	14	141
Car-axle	W. F. Brooks	198,870	Jan. 1, 1878	150	43	13	52
Car-axle	N. Jones	199,207	Jan. 15, 1878	513	151	13	96
Car-axle	N. Jones	199,208	Jan. 15, 1878	514	151	13	96
Car-axle	N. Jones	201,881	Apr. 2, 1878	24	6	13	602
Car-axle	N. Jones	210,783	Dec. 10, 1878	431	120	14	889
Car-axle	G. W. Millington	200,798	Feb. 26, 1878	946	279	13	402
Car-axle	G. W. Millimore	200,746	Feb. 26, 1878	898	264	13	394
Car-axle	W. H. Murphy	206,599	July 30, 1878	1300	374	14	186
Car-axle	W. H. Murphy	210,623	Dec. 10, 1878	266	72	14	867
Car-axle	O. D. Spalding	210,814	Dec. 10, 1878	464	130	14	893
Car-axle	H. Watkeys	201,726	Mar. 26, 1878	951	291	13	571
Car-axle	H. Watkeys	202,682	Apr. 23, 1878	909	260	13	738
Car-axle	J. W. Whittic	205,324	June 25, 1878	975	288	13	1153
Car-axle and loose wheel	W. S. G. Baker	203,577	May 14, 1878	377	107	13	680
Car-axle and wheel	J. M. Whiting	200,884	Mar. 5, 1878	69	24	13	426
Car-axles, Machine for straightening	J. A. Hodel	208,601	Oct. 1, 1878	147	43	14	509
Car-brake	A. B. Allen	205,987	July 16, 1878	592	170	14	93
Car-brake	H. Empey	208,229	Sept. 24, 1878	715	210	14	452
Car-brake	J. V. Ericson	201,917	Apr. 2, 1878	59	16	13	607
Car-brake	H. H. Garrison	205,537	July 2, 1878	77	22	14	19
Car-brake	A. F. Gue and G. F. Field	190,286	Jan. 15, 1878	587	172	13	107
Car-brake	A. K. Hadley	199,434	Jan. 22, 1878	744	218	13	140
Car-brake	S. Hewitt	207,179	Aug. 20, 1878	554	166	14	282
Car-brake	J. Johnson	204,491	June 4, 1878	68	24	13	1022
Car-brake	J. A. Kirby	200,313	Feb. 12, 1878	433	129	13	308
Car-brake	W. Longbridge	206,464	July 30, 1878	1157	332	14	171
Car-brake	C. H. Nye	210,050	Nov. 19, 1878	569	171	14	764
Car-brake	W. W. Patterson	208,116	Sept. 17, 1878	577	172	14	431
Car-brake	J. Ramsey, jr	204,372	May 28, 1878	1240	353	13	1000
Car-brake	D. A. Rees	207,819	Sept. 10, 1878	249	78	14	384
Car-brake	A. Rosenfield	202,472	Apr. 16, 1878	656	192	13	700
Car-brake	W. H. Ward	201,313	Mar. 12, 1878	507	156	13	496
Car-brake	W. H. Wilder and C. W. Cenant	206,286	July 23, 1878	939	266	14	140
Car-brake and starter	J. E. Brown	200,167	Feb. 12, 1878	236	85	13	283
Car-brake and starter	W. C. Thairlwall	201,720	Mar. 26, 1878	942	289	13	570
Car-brake, Automatic	W. L. Card	200,602	Feb. 26, 1878	748	210	13	372
Car-brake, Automatic	W. L. Card	207,501	Aug. 27, 1878	901	266	14	321
Car-brake, Automatic	G. A. Neal	204,679	June 11, 1878	262	82	13	1653
Car-brake coupling	F. W. Eames	200,031	Feb. 5, 1878	135	44	13	254
Car-brake, Railway	W. R. Green	208,086	Sept. 17, 1878	545	163	14	427
Car-brake shoe	W. McConway	199,161	Jan. 15, 1878	467	138	13	69
Car-brake shoe, Railway	R. N. Allen	202,772	Apr. 23, 1878	909	287	13	750
Car-bumper	C. C. Neimeister	207,435	Aug. 27, 1878	830	246	14	823



## Alphabetical list of inventions—Continued.

Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Car, Combined freight and stock .....	J. Sproat .....	206,840	Aug. 6, 1878	189	60	14	230
Car-coupling .....	G. H. Ames .....	206,159	July 23, 1878	791	227	14	121
Car-coupling .....	J. J. Anthony .....	199,173	Jan. 15, 1878	478	141	13	90
Car-coupling .....	J. Ballard .....	207,094	Aug. 13, 1878	454	138	13	265
Car-coupling .....	J. L. Berry .....	207,100	Aug. 20, 1878	478	144	14	273
Car-coupling .....	A. E. Bradbury and V. B. Barstow .....	207,341	Aug. 27, 1878	734	220	14	311
Car-coupling .....	J. Brady .....	201,644	Mar. 26, 1878	877	267	13	559
Car-coupling .....	B. D. Brown and J. F. Paden .....	206,769	Aug. 6, 1878	115	36	14	221
Car-coupling .....	L. Brown .....	208,457	Oct. 1, 1878	3	1	14	489
Car-coupling .....	M. Burpee .....	210,597	Dec. 10, 1878	236	64	14	864
Car-coupling .....	J. Chapman .....	202,229	Apr. 9, 1878	394	115	13	659
Car-coupling .....	R. D. Chatterton .....	205,838	July 9, 1878	420	119	14	66
Car-coupling .....	A. H. Clark .....	203,118	Apr. 30, 1878	1359	396	13	800
Car-coupling .....	C. L. Cloutman .....	209,656	Nov. 5, 1878	133	39	14	699
Car-coupling .....	C. W. Cornell .....	210,451	Dec. 3, 1878	64	16	14	832
Car-coupling .....	M. R. Delay .....	200,438	Feb. 19, 1878	568	167	13	336
Car-coupling .....	H. J. L. Dette .....	198,736	Jan. 1, 1878	4	1	13	9
Car-coupling .....	L. M. Dice .....	202,333	Apr. 16, 1878	520	152	13	680
Car-coupling .....	W. Dorr .....	203,011	Apr. 30, 1878	1258	365	13	786
Car-coupling .....	W. Dunn .....	198,672	Jan. 8, 1878	204	76	13	56
Car-coupling .....	G. Edmonds .....	208,382	Sept. 24, 1878	874	254	14	472
Car-coupling .....	A. Elliott .....	204,013	May 21, 1878	846	242	13	946
Car-coupling .....	J. D. Ferguson .....	206,779	Aug. 6, 1878	124	39	14	222
Car-coupling .....	J. Forman .....	208,081	Sept. 17, 1878	540	161	14	426
Car-coupling .....	W. C. Gannett .....	205,260	June 25, 1878	900	266	13	1143
Car-coupling .....	J. H. Gassaway .....	205,628	July 2, 1878	168	50	14	31
Car-coupling .....	L. Gasser .....	204,313	May 28, 1878	1177	335	13	992
Car-coupling .....	C. Gifford .....	204,212	May 28, 1878	1080	307	13	980
Car-coupling .....	M. T. Greenleaf and G. Q. Adams .....	208,307	Sept. 24, 1878	799	233	14	462
Car-coupling .....	H. M. Grover .....	199,433	Jan. 22, 1878	744	218	13	140
Car-coupling .....	D. R. Halter .....	200,451	Feb. 19, 1878	580	171	13	338
Car-coupling .....	S. A. Haydock .....	210,117	Nov. 19, 1878	643	190	14	774
Car-coupling .....	F. Heavener .....	203,451	May 7, 1878	229	65	13	851
Car-coupling .....	J. H. Herff .....	201,609	Mar. 26, 1878	896	273	13	563
Car-coupling .....	J. B. Hills .....	203,912	May 21, 1878	733	210	13	933
Car-coupling .....	J. Hogan .....	201,922	Apr. 2, 1878	64	17	13	608
Car-coupling .....	E. A. Howland .....	202,261	Apr. 9, 1878	426	124	13	663
Car-coupling .....	F. P. Iannarone .....	202,109	Apr. 9, 1878	267	79	13	641
Car-coupling .....	O. and J. Johnson .....	209,402	Oct. 29, 1878	1044	304	14	649
Car-coupling .....	S. J. Kein .....	200,311	Feb. 12, 1878	429	128	13	307
Car-coupling .....	S. N. Keith .....	198,746	Jan. 1, 1878	17	4	13	11
Car-coupling .....	D. S. Kirck and N. Raichard .....	210,615	Dec. 10, 1878	258	70	14	866
Car-coupling .....	J. Kuntze .....	206,582	July 30, 1878	1283	368	14	187
Car-coupling .....	J. Lahmeyer .....	207,663	Sept. 3, 1878	81	25	14	359
Car-coupling .....	J. R. Lamb .....	206,027	July 16, 1878	629	182	14	97
Car-coupling .....	M. Logan .....	206,462	July 30, 1878	1156	331	14	171
Car-coupling .....	J. G. Main .....	208,188	Sept. 17, 1878	658	193	14	442
Car-coupling .....	J. McGeehon .....	201,812	Mar. 26, 1878	1037	317	13	584
Car-coupling .....	E. H. McGinty and F. Mead .....	206,119	July 16, 1878	730	210	14	109
Car-coupling .....	A. L. Miller .....	199,658	Jan. 29, 1878	1003	292	13	188
Car-coupling .....	W. N. Patterson .....	200,752	Feb. 26, 1878	904	266	13	395
Car-coupling .....	J. L. Pope and W. S. Sampson .....	205,298	June 25, 1878	941	279	13	1148
Car-coupling .....	H. H. Potter .....	201,825	Mar. 26, 1878	1050	321	13	585
Car-coupling .....	H. H. Potter .....	209,635	Nov. 12, 1878	330	98, 99	14	729
Car-coupling .....	E. R. Quimby .....	202,117	Apr. 9, 1878	276	81	13	643
Car-coupling .....	J. B. Raby and D. J. Summers .....	203,772	May 14, 1878	574	161	13	905
Car-coupling .....	A. Rice .....	207,068	Aug. 13, 1878	425	132	14	262
Car-coupling .....	J. Ritty .....	204,997	June 18, 1878	621	182	13	1101
Car-coupling .....	C. A. Roberts .....	204,251	May 28, 1878	1117	319	13	985
Car-coupling .....	J. A. Ross .....	208,336	Sept. 24, 1878	828	242	14	466
Car-coupling .....	B. Rowell .....	198,903	Jan. 1, 1878	187	53	13	37
Car-coupling .....	R. S. Russell .....	208,694	Oct. 8, 1878	257	73	14	531
Car-coupling .....	J. Simmons .....	208,934	Oct. 15, 1878	528	155	14	571
Car-coupling .....	J. W. Snapp .....	210,215	Nov. 26, 1878	760	226	14	793
Car-coupling .....	J. C. and W. H. Stratton .....	207,992	Sept. 10, 1878	438	132	14	408
Car-coupling .....	W. A. Tew .....	200,359	Feb. 12, 1878	480	141	13	315
Car-coupling .....	C. H. Trask .....	209,433	Oct. 29, 1878	1079	313	14	654
Car-coupling .....	W. H. Ward .....	201,312	Mar. 12, 1878	505	156	13	496
Car-coupling .....	L. M. Webb and E. Tinker .....	207,921	Sept. 10, 1878	364	111	14	398
Car-coupling .....	G. E. Weber .....	203,679	May 14, 1878	476	135	13	892
Car-coupling .....	C. H. Wood .....	204,470	June 4, 1878	52	17	13	1020
Car-coupling .....	J. A. Woodmansee .....	202,622	Apr. 16, 1878	825	238 } 239 } 273 } 274 }	13	719
Car-coupling draw-bar .....	E. H. Janney .....	207,525	Aug. 27, 1878	931	274 }	14	335
Car-coupling pin .....	S. J. Gott .....	198,937	Jan. 8, 1878	228	64	13	51
Car-coupling tool .....	H. Sullings .....	207,994	Sept. 10, 1878	440	132	14	408
Car-couplings, Link-guide for .....	A. M. Miller .....	203,846	May 21, 1878	666	189	13	923
Car-door .....	J. G. and G. M. Brill .....	202,921	Apr. 30, 1878	1173	338	13	775
Car-door .....	R. H. Coleman .....	205,477	July 2, 1878	13	5	14	10
Car-door .....	A. F. Van Liew .....	201,306	Mar. 12, 1878	497	153	13	495
Car-door fastening .....	B. F. Jackson .....	207,605	Sept. 3, 1878	20	8	14	352
Car-door fastening, Freight .....	W. Engles .....	207,859	Sept. 10, 1878	294	90	14	390
Car door, Freight .....	G. M. Cooper .....	209,462	Oct. 29, 1878	1109	322	14	659
Car door, Grain .....	D. F. Specs .....	205,767	July 9, 1878	341	99	14	55
Car door, Grain .....	D. F. Van Liew .....	201,963	Apr. 2, 1878	99	29	13	613
Car door, Grain .....	C. R. Watson .....	203,226	Apr. 30, 1878	1477	432	13	815
Car-door opener, Street .....	J. Hutton, Jr. .....	208,243	Sept. 24, 1878	730	214	14	454
Car draw-bar, Railway .....	J. R. Fish .....	207,727	Sept. 3, 1878	145	49	14	367
Car draw-bar, Street .....	A. W. Eggleston .....	205,622	July 2, 1878	163	49	14	30
Car draw-bar, Street .....	J. W. Law .....	203,281	May 7, 1878	45	14	13	826
Car, Dumping .....	L. Prince .....	208,634	Oct. 1, 1878	183	52	14	513
Car, Dumping .....	M. Van Wormer .....	199,761	Jan. 29, 1878	1095	322	13	203
Car, Dumping .....	M. Van Wormer .....	200,813	Feb. 26, 1878	961	283	13	404

*Alphabetical list of inventions—Continued.*

Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Car fender, Street.	S. Brisac and W. Barbe	205,471	July 2, 1878	8	3	14	10
Car, Freight.	R. Hudson	208,393	Sept. 24, 1878	885	258	14	473
Car, Hand.	C. C. Kerr	210,332	Nov. 26, 1878	885	260	14	809
Car-heater.	F. S. Bissell	205,468	July 2, 1878	6	2	14	9
Car-heater.	F. E. Ensign	208,013	Sept. 17, 1878	473	142	14	417
Car-heater.	W. M. Jackson	203,918	May 21, 1878	738	212	13	563
Car-heater.	W. Smith	201,061	Mar. 5, 1878	240	76	13	451
Car-heater.	J. J. Winsor	201,857	Mar. 26, 1878	1086	330	13	590
Car-heating apparatus.	J. W. Graydon	203,611	May 14, 1878	407	116	13	884
Car heating apparatus, Railway.	A. S. Brownell	207,588	Sept. 3, 1878	4	2	14	349
Car-indicator.	J. C. Winder	208,780	Oct. 8, 1878	346	99	14	542
Car indicator, Freight.	J. Tatham	205,151	June 18, 1878	777	230	13	1122
Car-journal cooler.	R. C. Morris	207,336	Aug. 20, 1878	713	213	14	303
Car lock, Freight.	F. J. Hoyt	199,713	Jan. 29, 1878	1054	308	13	196
Car motor, Street.	J. F. Kelley	204,052	May 21, 1878	881	252	13	951
Car-mover.	J. B. Deeds	206,231	July 23, 1878	873	249	14	131
Car, One-track railway.	D. B. James	208,738	Oct. 8, 1878	301	86	14	536
Car, Open railway.	W. H. Paige	205,206	June 25, 1878	845	251	13	1136
Car, Platform.	E. H. Janney and L. R. Mathews	207,183	Aug. 20, 1878	559	167	14	283
Car-platform fender.	A. Hance	207,736	Sept. 3, 1878	155	47	14	309
Car platform, Railway.	P. Hicn	209,890	Nov. 12, 1878	385	115	14	736
Car propeller, Street.	J. B. Atwater	205,991	July 16, 1878	595	171	14	93
Car-propelling device.	H. A. Kaufle	205,651	July 2, 1878	196	59	14	34
Car, Railway.	B. F. Card	206,163	July 23, 1878	798	228	14	122
Car, Railway.	R. L. and C. W. Dabney, jr.	203,009	May 21, 1878	841	240	13	946
Car, Railway.	J. T. and D. R. Leighton	206,253	July 23, 1878	897	256	14	134
Car, Railway.	J. C. Paul	201,585	Mar. 19, 1878	803	245	13	544
Car, Railway.	J. A. S. Simonson	203,661	May 14, 1878	457	131	13	830
Car-registering apparatus.	R. McCully	200,073	Feb. 5, 1878	183	58, 59	13	261
Car-registering apparatus.	R. McCully	200,074	Feb. 5, 1878	185	59	13	262
Car-registering apparatus.	R. McCully	200,075	Feb. 5, 1878	136	59	13	262
Car-registering apparatus.	R. McCully	200,076	Feb. 5, 1878	187	60	13	262
Car-roof.	H. Aldridge	208,907	Sept. 17, 1878	469	141	14	417
Car-roof.	L. P. Barnes and J. H. Faupel	199,014	Jan. 8, 1878	304	89	13	63
Car-roof.	C. H. Thompson	207,569	Aug. 27, 1878	978	288	14	341
Car-roofs, Cinder-guard for.	R. H. Hooper	210,035	Nov. 19, 1878	554	166	14	762
Car running-gear, Railway.	J. C. Weaver	209,093	Oct. 15, 1878	704	204	14	594
Car running-gear, Street.	H. C. Hunter and J. Everding	203,154	Apr. 30, 1878	1402	409	13	806
Car, Safety.	T. Mueller	208,113	Sept. 17, 1878	574	171	14	430
Car-seat.	E. B. Simpson	201,056	Mar. 5, 1878	236	75	13	451
Car seat and couch.	N. B. Sherwood	204,848	June 11, 1878	447	131	13	1075
Car seat and couch, Convertible.	C. A. Piccioli	210,628	Dec. 10, 1878	272	74	14	868
Car-seat lock.	A. K. Waddill	202,308	Apr. 9, 1878	475	139	13	670
Car-seats, Portable hammock attachment for.	M. D. Brooks	198,927	Jan. 8, 1878	219	62	13	49
Car-shutter.	J. G. and G. M. Brill	202,920	Apr. 30, 1878	1172	338	13	775
Car, Sleeping.	A. Jaeger	204,230	May 28, 1878	1637	313	13	982
Car, Sleeping.	B. F. Manier	201,186	Mar. 12, 1878	367	114	13	477
Car, Sleeping.	W. D. Mann	198,991	Jan. 8, 1878	283	82, 83	13	59
Car, Sleeping.	E. Robinson	204,684	June 11, 1878	268	83	13	1054
Car, Sleeping.	A. M. Smith	204,855	June 11, 1878	453	132	13	1075
Car-spring.	A. B. Davis	211,000	Dec. 17, 1878	697	192	14	930
Car-spring.	C. French	200,860	Mar. 5, 1878	45	16	13	422
Car-spring.	H. Gardiner	200,610	Feb. 26, 1878	756	222	13	373
Car-spring.	G. F. Godley	198,843	Jan. 1, 1878	120	34	13	27
Car-spring.	G. F. Godley	208,904	Oct. 15, 1878	495	143	14	506
Car-spring.	W. P. Hansell	201,523	Mar. 19, 1878	733	223	13	536
Car-spring.	W. P. Hansell	210,027	Nov. 19, 1878	546	164	14	761
Car-spring.	C. M. Higginson	205,269	June 25, 1878	907	269	13	1144
Car-starter.	J. Hansell	206,562	July 30, 1878	1259	362	14	184
Car-starter.	R. Hernance	210,852	Dec. 17, 1878	513	145	14	908
Car-starter.	H. P. Holt	211,015	Dec. 17, 1878	711	196	14	931
Car-starter.	W. Jasper	199,158	Jan. 15, 1878	404	137	13	88
Car-starter.	W. Jasper	201,421	Mar. 19, 1878	633	193	13	521
Car-starter.	W. H. Lynn	206,465	July 30, 1878	1158	332	14	171
Car-starter.	W. H. Lynn and C. C. Snyder	203,590	July 30, 1878	1290	371	14	187
Car-starter.	C. H. Nye	211,039	Dec. 17, 1878	754	206	14	936
Car-starter.	J. Pritchard	201,700	Mar. 26, 1878	921	282	13	566
Car-starter.	H. Schreiner	199,665	Jan. 29, 1878	1010	294	13	189
Car-starter.	H. Schreiner	208,040	Sept. 17, 1878	504	150	14	421
Car-starter.	N. Van Vleto	203,512	May 7, 1878	288	82	13	860
Car-starter.	E. A. Whitaker	208,778	Oct. 8, 1878	345	99	14	542
Car, Steam street.	E. P. Vaux	199,762	Jan. 29, 1878	1099	322	13	203
Car-step register.	W. Beeson	198,786	Jan. 1, 1878	70	18	13	18
Car, Stock.	W. H. Hayes	200,719	Feb. 26, 1878	872	256	13	390
Car, Stock.	J. Miller	202,854	Apr. 23, 1878	1089	311	13	761
Car, Stock.	H. S. Moody	208,839	Oct. 8, 1878	419	121	14	532
Car, Stock.	A. Nicolassen	199,855	Jan. 29, 1878	1187	349	13	217
Car, Stock.	W. B. VanVleet	203,157	June 18, 1878	782	231	13	1123
Car, Stock.	W. C. Whitam and C. C. Schneider.	211,072	Dec. 17, 1878	788	210	14	940
Car, Street.	W. L. Everit	207,726	Sept. 3, 1878	144	44	14	367
Car, Street.	W. H. Paige	205,205	June 25, 1878	844	250	13	1136
Car, Street.	T. Sharer	211,060	Dec. 17, 1878	776	213	14	939
Car tank, Stock.	S. Johnson	201,250	Mar. 12, 1878	436	134	13	486
Car-transfer apparatus.	R. H. Ramsey	204,087	May 21, 1878	921	203	13	956
Car, Ventilated grain.	H. A. Gouge	205,634	July 2, 1878	175	52	14	31
Car-ventilator.	C. A. Daniels	202,241	Apr. 9, 1878	409	119	13	660
Car-ventilator.	H. S. Newberry	209,914	Nov. 12, 1878	408	123	14	740
Car-ventilator.	C. T. Tatlo	203,088	Apr. 30, 1878	1332	387	13	796
Car-ventilator.	E. A. Tuttle	208,349	Sept. 24, 1878	842	245	14	408
Car-ventilator valve, Railway.	E. H. Winchell	204,271	May 28, 1878	1133	324	13	987

*Alphabetical list of inventions—Continued.*

Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Car ventilator-window.....	E. Robinson.....	208,495	Oct. 1, 1878	40	12	14	494
Car-wheel.....	C. E. Candee.....	200,254	Feb. 12, 1878	370	109	13	298
Car-wheel.....	I. H. Congdon.....	210,671	Dec. 10, 1878	317	87	14	874
Car-wheel.....	G. W. Eddy.....	199,627	Jan. 29, 1878	973	283	13	184
Car-wheel.....	E. Kaselowsky.....	200,400	Feb. 19, 1878	531	157	13	331
Car-wheel.....	R. S. Semple.....	208,542	Oct. 1, 1878	86	25	14	500
Car-wheel.....	J. H. and S. Watt.....	204,638	June 4, 1878	214	68	13	1043
Car-wheel and axle.....	D. M. Cummings.....	203,893	May 21, 1878	710	203	13	929
Car-wheel and lubricator.....	B. F. Shelabarger.....	198,819	Jan. 1, 1878	98	27	13	23
Car-wheel for elevated railways.....	M. V. B. Ethridge.....	208,580	Oct. 1, 1878	129	37	14	506
Car-wheel molds, Machine for making.....	B. Burgess.....	199,259	Jan. 15, 1878	558	164	13	103
Car-wheel, Self-oiling.....	T. H. Phillips.....	202,581	Apr. 16, 1878	783	226	13	714
Car-wheels, Chill for.....	J. M. Barr.....	207,794	Sept. 10, 1878	226	71	14	381
Car-window.....	C. T. Deblois.....	203,123	Apr. 30, 1878	1363	397	13	801
Car-window.....	B. L. Wood.....	201,850	Mar. 26, 1878	1088	331	13	590
Car-window deflector.....	D. M. Everstine.....	199,630	Jan. 29, 1878	976	284	13	184
Car-window, Railway.....	S. Darling.....	201,598	Mar. 26, 1878	832	252	13	553
Car-windows, Dust-screen holder for.....	E. L. Wallace.....	198,917	Jan. 1, 1878	201	57	13	39
Cars, Draw-bar attachment for railway.....	J. H. Smith.....	208,994	Oct. 15, 1878	591	172	14	579
Cars, Draw-bar for railway.....	G. F. Godley.....	201,517	Mar. 19, 1878	728	222	13	535
Cars, Driving, coupling, and braking appliance for railway.....	F. O. Deschamps.....	206,093	July 16, 1878	695	201	14	106
Cars, Driving-gear for street.....	J. Bishop.....	200,499	Feb. 19, 1878	625	184	13	345
Cars, Dust-arrester for railway.....	A. Clarke.....	204,134	May 28, 1878	990	281	13	968
Cars, Dust-deflector for.....	H. A. Morgan and D. J. Gilleland.....	209,066	Oct. 15, 1878	679	196	14	590
Cars, Heating.....	W. C. Baker.....	209,793	Nov. 12, 1878	288	86	14	723
Cars, Heating railway.....	J. W. Graydon.....	209,166	Oct. 22, 1878	802	232	14	612
Cars, Pipe-coupling for.....	F. King.....	210,459	Dec. 3, 1878	73	18	14	834
Cars, Pipe-coupling for railway.....	E. L. Brady.....	210,910	Dec. 17, 1878	596	165	14	918
Cars, Pushing-bar for railway.....	I. S. Goldman.....	200,136	Feb. 12, 1878	254	70	13	281
Cars, Safety-guard for.....	J. W. Harding and I. Towell.....	199,974	Feb. 5, 1878	83	27	13	246
Cars, Sand-box for street.....	J. E. Shaw.....	209,196	Oct. 22, 1878	832	240	14	616
Cars, Traction-wheel for street.....	E. Manley.....	210,206	Nov. 26, 1878	752	223	14	793
Cars, Ventilating.....	H. H. Wolfe.....	208,132	Sept. 17, 1878	597	177	14	434
Cars, Unloading.....	G. P. Merrill and P. Dowling.....	202,182	Apr. 9, 1878	348	102	13	652
Cars, Unloading rails and ties from.....	D. S. Moore.....	200,148	Feb. 12, 1878	266	79	13	282
Carbon-bisulphide, Apparatus for manufacture of.....	D. D. Parmelee.....	206,477	July 30, 1878	1169	{ 335 336 }	14	173
Carboy-case.....	J. H. Coleman.....	205,614	July 2, 1878	153	46	14	29
Carbureter.....	D. C. Battey.....	203,579	May 14, 1878	380	107	13	880
Carbureter.....	J. Bradley.....	199,781	Jan. 29, 1878	1116	323	13	206
Carbureter.....	H. M. Dougherty.....	210,019	Nov. 19, 1878	538	162	14	760
Carbureter.....	S. E. Hughes.....	203,458	May 7, 1878	235	67	13	852
Carbureter.....	T. Miner.....	207,886	Sept. 10, 1878	325	99	14	393
Carbureter.....	W. Morehouse.....	205,201	June 25, 1878	840	249	13	1135
Carbureter.....	A. W. Porter.....	206,196	July 23, 1878	835	{ 238 239 }	14	127
Carbureter.....	J. Reed.....	203,371	May 7, 1878	142	41	13	840
Carbureter.....	W. H. Reed.....	200,568	Feb. 19, 1878	695	204	13	356
Carbureter.....	M. Shea and J. M. Hamilton.....	200,000	Feb. 5, 1878	106	35	13	250
Carbureter.....	B. Sloper.....	203,505	May 7, 1878	279	80	13	859
Carbureter, Air.....	G. Reznor.....	209,076	Oct. 15, 1878	689	200	14	592
Carbureter for cars.....	W. M. Sloane.....	210,717	Dec. 10, 1878	362	99	14	879
Carbureter, Gas and air.....	C. C. Dusenbury and W. H. Winn.....	204,413	May 28, 1878	1281	365	13	1005
Carbureters, Feed regulator for.....	G. L. Gray.....	199,055	Jan. 8, 1878	343	100	13	69
Carbureters, Purifier and regulator for.....	H. W. Merritt.....	209,351	Oct. 29, 1878	996	289	14	642
Carbureting apparatus.....	M. D. Nelson.....	199,928	Feb. 5, 1878	40	13	13	239
Carbureting apparatus.....	C. A. Paquelin.....	206,402	July 30, 1878	1092	312	14	163
Carbureting apparatus.....	L. H. Reid.....	207,983	Sept. 10, 1878	429	129	14	407
Carbureting apparatus, Air.....	H. J. Hyams.....	204,974	June 18, 1878	598	{ 174 175 }	13	1098
Carbureting apparatus, Air.....	C. E. Walle and S. Munyon.....	199,246	Jan. 15, 1878	545	160	13	101
Carbureting apparatus, Air and gas.....	M. Buell.....	203,702	May 14, 1878	501	142	13	896
Carbureting apparatus for gas-burners.....	C. Hoff.....	203,456	May 7, 1878	234	67	13	852
Carbureting apparatus for gas-burners.....	C. G. Spengler.....	199,323	Jan. 15, 1878	627	182	13	113
Carbureting illuminating-gas, Apparatus for.....	J. F. Otten and J. Kluber.....	209,505	Oct. 29, 1878	1152	335	14	665
Carbureting-lamp.....	C. E. Ball.....	206,999	Aug. 13, 1878	362	111	14	254
Carbureting-machine.....	A. Henning.....	209,479	Oct. 29, 1878	1124	328	14	061
Card-cutter, Rotary.....	E. Morgan.....	208,754	Oct. 8, 1878	320	91, 92	14	539
Card, Educational and advertising.....	G. C. Bell.....	202,692	Apr. 23, 1878	919	263	13	739
Card, Sample.....	S. Kutnow.....	206,461	July 30, 1878	1155	331	14	171
Card, Sample.....	A. Zerban.....	202,210	Apr. 9, 1878	372	109	13	656
Cards, Apparatus for shuffling.....	H. C. Ash.....	205,030	June 18, 1878	652	192	13	1105
Carding-machine.....	B. F. Haigh.....	207,272	Aug. 20, 1878	653	194	14	295
Carding-machine.....	C. Jones.....	209,692	Nov. 5, 1878	169	50	14	703
Carding-machine clearing attachment.....	E. Moog.....	205,805	July 9, 1878	387	111	14	61
Carding-machine feeding device.....	C. Schofield and R. Wilde.....	205,427	June 25, 1878	1076	{ 318 319 }	13	1166
Carding-machine stripping attachment.....	M. H. Whitcomb and J. Bliss.....	206,510	July 30, 1878	1207	347	14	177
Carpenter's gage-tool.....	E. R. and G. W. Dunlap.....	207,494	Aug. 27, 1878	896	264	14	330
Carpet.....	J. C. Duckworth.....	204,546	June 4, 1878	114	39	13	1029
Carpet-cleaner.....	C. Cummings.....	200,822	Mar. 5, 1878	7	3	13	416
Carpet-cleaner.....	F. C. Walker.....	199,880	Jan. 29, 1878	1210	355	13	220
Carpet-cleaning machine.....	J. Rae.....	203,853	May 21, 1878	671	190	13	924
Carpet fabric.....	H. Hardwick.....	205,638	July 2, 1878	179	54	14	32
Carpet fabric.....	B. Weiland.....	205,708	July 2, 1878	261	78	14	41
Carpet-fastener.....	W. Aldrich.....	200,421	Feb. 19, 1878	552	163	13	334
Carpet-fastener.....	F. O. Clark.....	200,172	Feb. 12, 1878	292	87	13	286
Carpet-fastener.....	R. Currier.....	206,666	Aug. 6, 1878	9	3	14	208
Carpet-fastener.....	B. Martignoni.....	209,493	Oct. 29, 1878	1137	332	14	663
Carpet-fastener.....	D. F. Stambaugh.....	203,209	Apr. 30, 1878	1461	427	13	813
Carpet fastener, Stair.....	M. Krickl.....	209,408	Oct. 29, 1878	1049	305	14	650
Carpet-lining.....	R. J. Macdonald.....	201,929	Apr. 2, 1878	69	19	13	608
Carpet-lining.....	C. A. Pease.....	202,579	Apr. 16, 1878	781	225	13	714
Carpet-lining.....	A. Robinson.....	198,816	Jan. 1, 1878	96	27	13	23



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Carpet, Moquette	A. Smith and H. Skinner	203,663	May 14, 1878	460	131	13	890
Carpet-stretcher	J. H. Lucas	203,055	Apr. 30, 1878	1298	377	13	792
Carpet-stretcher	R. J. Parrett	199,462	Jan. 22, 1878	771	226	13	145
Carpet-stretcher and fastener	W. H. Sallada	205,425	June 25, 1878	1074	818	13	1105
Carpet-sweeper	M. R. Bissell	199,612	Jan. 29, 1878	953	277	13	181
Carpet-sweeper	B. Fizer	199,632	Jan. 29, 1878	978	284	13	184
Carpet-sweeper	L. Hull	205,748	July 9, 1878	322	94	14	53
Carpet-sweeper	L. Hull	209,687	Nov. 5, 1878	164	48	14	763
Carpet-sweeper	F. Kammerer	207,040	Aug. 13, 1878	358	124	14	230
Carpet-sweeper	H. F. Noyes	203,489	May 7, 1878	205	76	13	857
Carpet-tacker and stretcher	C. A. Briggs	203,531	May 14, 1878	331	94	13	874
Carriage	C. H. Palmer, jr.	208,923	Oct. 15, 1878	517	150	14	569
Carriage and chair combined	T. and T. P. Longking	202,500	Apr. 10, 1878	761	226	13	712
Carriage and sleigh box, Child's	C. Pieffer	210,266	Nov. 26, 1878	813	241	14	800
Carriage-axle	W. E. Miller	200,214	Feb. 12, 1878	327	98	13	292
Carriage-boot	C. W. Brown	208,367	Sept. 24, 1878	860	250	14	470
Carriage-boot	C. P. Dodge and C. W. Brown	200,440	Feb. 19, 1878	569	108	13	395
Carriage-bow setter	W. B. Maxwell	206,808	Aug. 6, 1878	153	48	14	226
Carriage, Child's	H. Borchardt	203,582	May 14, 1878	382	108	13	881
Carriage, Child's	R. G. Britton	199,505	Jan. 22, 1878	817	239	13	152
Carriage, Child's	J. F. Downing	208,380	Sept. 24, 1878	872	254	14	472
Carriage, Child's	C. Gillis	202,715	Apr. 23, 1878	941	269	13	742
Carriage, Child's	G. T. Palmer	199,097	Jan. 8, 1878	382	114	13	76
Carriage, Child's	G. W. Pearce	201,043	Mar. 5, 1878	224	70	13	440
Carriage, Child's	G. E. Phelps	206,038	July 16, 1878	640	186	14	59
Carriage, Child's	J. A. S. Simonson	201,561	Mar. 10, 1878	774	236	13	541
Carriage, Child's	J. Sues and S. W. Raplee	207,220	Aug. 20, 1878	596	179	14	213
Carriage, Child's folding	R. Kreter	203,742	May 14, 1878	543	154	13	901
Carriage-clip, Iron	J. W. Anderson	199,679	Jan. 29, 1878	1023	298	13	191
Carriage-clips, Die for forging	M. Hine	210,694	Dec. 10, 1878	338	92	14	876
Carriage-curtain fastener	G. R. Pierpont	207,546	Aug. 27, 1878	956	280	14	328
Carriage-curtain fastening	J. Woods, jr.	210,389	Nov. 26, 1878	955	277	14	818
Carriage-curtain loop	G. L. Crandal	199,798	Jan. 29, 1878	1137	334	13	209
Carriage-curtain window	F. A. Neider	208,196	Sept. 17, 1878	663	195	14	442
Carriage-dash	B. J. Warden	210,583	Dec. 3, 1878	213	56	14	851
Carriage-dash foot	J. W. Brown	204,530	June 4, 1878	101	34	13	1027
Carriage-door	D. E. Gale	204,807	June 11, 1878	404	118	13	1070
Carriage-door, Folding	A. Bink	202,091	Apr. 9, 1878	249	73	13	639
Carriage-jack	W. A. Foster	201,768	Mar. 26, 1878	997	305	13	578
Carriage-jack	E. Prescott	207,442	Aug. 27, 1878	838	248	14	324
Carriage, Jump-seat	C. K. Mellinger	207,539	Aug. 27, 1878	947	278	14	357
Carriage-knob	G. L. Crandal	198,840	Jan. 1, 1878	118	34	13	27
Carriage running-gear	R. R. Miller	207,761	Sept. 3, 1878	181	55	14	372
Carriage-seat	D. E. Gale	204,891	June 18, 1878	516	151	13	1087
Carriage-seat	J. D. Olds	199,310	Jan. 15, 1878	612	178	13	111
Carriage-seat	J. D. Olds	202,575	Apr. 16, 1878	777	224	13	713
Carriage-seat	C. H. Stratton	204,859	June 11, 1878	456	183	13	1076
Carriage-seat corner-iron	L. Emerson	208,971	Oct. 15, 1878	571	166	14	576
Carriage-seat corner-iron	W. B. C. Hershey	204,326	May 28, 1878	1192	339	13	994
Carriage-seats, Shifting-rail for	C. Fritschy	200,447	Feb. 19, 1878	577	170	13	338
Carriage-spring	D. Dalzell	206,302	July 23, 1878	955	271	14	142
Carriage-spring	J. Enders	202,840	Apr. 16, 1878	529	155	13	682
Carriage-spring	G. D. Griffin	208,890	Sept. 24, 1878	882	257	14	473
Carriage-spring	J. W. and W. J. Hewitt	199,646	Jan. 29, 1878	993	289	13	117
Carriage-spring	J. A. Lewis	200,208	Feb. 12, 1878	323	97	13	291
Carriage-spring	J. D. Sarven	202,965	Apr. 30, 1878	1216	351	13	781
Carriage-spring	G. K. Smith	200,580	Feb. 19, 1878	708	208	13	353
Carriage-spring coupling	M. L. Ballard	201,381	Mar. 19, 1878	592	182	13	516
Carriage-step	F. A. Sawyer, 2d	203,076	Apr. 30, 1878	1320	384	13	795
Carriage-step	F. A. Sawyer, 2d	210,470	Dec. 3, 1878	83	21	14	835
Carriage-top	J. V. Emmitt	200,269	Feb. 12, 1878	388	115	12	301
Carriage-top	V. B. Grinnell and F. Bulckens	207,734	Sept. 3, 1878	154	46	14	368
Carriage-top	D. W. Hazeltime	199,706	Jan. 29, 1878	1049	307	13	193
Carriage-top	J. Kuntz and S. P. Schroeder	210,128	Nov. 19, 1878	653	194	14	776
Carriage-top	T. Scattergood	201,706	Mar. 26, 1878	931	285	13	568
Carriage-top, Adjustable	C. Dudley	202,004	Apr. 2, 1878	141	41	13	619
Carriage-top, Adjustable	O. B. North	202,043	Apr. 2, 1878	184	53	13	625
Carriage-top adjuster	C. Dudley	202,527	Apr. 16, 1878	708	207	13	767
Carriage-top adjuster	P. H. Lindsey	202,355	Apr. 16, 1878	544	159	13	684
Carriage-top joint	J. G. English	210,610	Dec. 3, 1878	129	34	14	840
Carriage-top prop	H. S. Crandal	203,246	May 7, 1878	10	4	13	822
Carriage-top prop	J. P. Simpson	209,198	Oct. 22, 1878	834	241	14	616
Carriage-top, Shifting	C. Easterling	200,858	Mar. 5, 1878	43	16	13	422
Carriage-top standard	E. Betz	207,941	Sept. 10, 1878	387	116	14	401
Carriage-top standard	F. W. Whitney	209,097	Oct. 15, 1878	711	206	14	593
Carriage wheel and axle	W. H. Kinter and B. F. Williams	202,551	Apr. 16, 1878	754	218	13	711
Carriage-wheel guard	G. R. Mangham	201,545	Mar. 19, 1878	758	231	13	539
Carriage-window	F. A. Neider	206,600	July 30, 1878	1301	374	14	129
Carriage-window	J. Woods, jr.	202,131	Apr. 9, 1878	122	86	13	645
Carriage-wrench	G. W. Remington	204,089	May 21, 1878	923	264	13	956
Carriages, Canopy-adjuster for children's	A. Clarke	202,329	Apr. 16, 1878	517	151	13	680
Carriages, Canopy-top for children's	C. W. F. Dare	208,718	Oct. 8, 1878	280	80	14	534
Carriages, &c., Door-check for	C. West	203,227	Apr. 30, 1878	1478	432	13	815
Carriages, Front gear for	A. Dallason and C. L. Leonard	203,326	May 7, 1878	97	28	13	833
Carriages, Hanging	C. Schmitt	207,075	Aug. 13, 1878	432	134	14	261
Carriages, Reversible handle for children's	A. Shoeninger	204,385	May 28, 1878	1252	357	13	1062
Carriages, Safety-stop for children's	J. Curten	209,856	Mar. 5, 1878	42	15	13	421
Carriages, Shade for children's	H. S. Smith	200,945	Mar. 5, 1878	122	40	13	434
Carriages, Shifting-rail for	P. B. Fuller	208,303	Sept. 24, 1878	796	231	14	462
Carrier							
See Egg-carrier.	Hay-carrier.						
Fruit-carrier.	Trace-carrier.						
Cart, Barrel	W. Plank	199,102	Jan. 8, 1878	387	115	13	77
Cart-body	F. H. Trenholm	201,209	Mar. 12, 1878	389	120	13	481

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Cart, Coal.....	F. Scholes .....	210, 153	Nov. 19, 1878	681	202	14	780
Cartridge.....	G. W. Evans .....	200, 995	Mar. 5, 1878	175	56	13	442
Cartridge.....	O. Jones and F. W. Marston .....	199, 717	Jan. 29, 1878	1058	309	13	197
Cartridge.....	F. W. Marston .....	209, 127	Oct. 22, 1878	762	221	14	607
Cartridge.....	R. Morris .....	202, 365	Apr. 16, 1878	552	162	13	685
Cartridge.....	W. Traube .....	210, 374	Nov. 26, 1878	937	272	14	816
Cartridge.....	E. M. Wright .....	207, 582	Aug. 27, 1878	1001	293	14	344
Cartridge-belt .....	V. Platz and W. W. Rogers .....	208, 265	Sept. 24, 1878	757	222	14	457
Cartridge-box .....	J. W. Frazier .....	202, 642	Apr. 23, 1878	868	249	13	733
Cartridge capping and uncapping implement .....	G. L. Bailey .....	201, 903	Apr. 2, 1878	45	12	13	695
Cartridge capping and uncapping implement .....	H. Bayliss .....	201, 733	Mar. 26, 1878	969	293	13	572
Cartridge-capping implement .....	T. M. Wallis .....	199, 600	Jan. 22, 1878	916	268	13	167
Cartridge-extractor .....	G. H. B. Hooper .....	204, 670	June 11, 1878	254	79	13	1052
Cartridge-extractor .....	J. S. Shinn .....	209, 989	Nov. 19, 1878	502	152	14	755
Cartridge for fire-arms.....	D. P. Bush and J. A. Krauspe .....	207, 248	Aug. 20, 1878	628	188	14	291
Cartridge-holder .....	D. C. Farrington .....	205, 180	June 25, 1878	817	243	13	1133
Cartridge-holder .....	R. H. Pooler and W. T. Jones .....	202, 463	Apr. 16, 1878	648	189	13	699
Cartridge-loading device .....	G. F. Card .....	209, 956	Nov. 19, 1878	468	141	14	751
Cartridge-loading device .....	H. Watkeys .....	203, 967	May 21, 1878	791	227	14	940
Cartridge-loading machine .....	M. V. Hill .....	203, 731	May 14, 1878	520	{ 150 151 }	13	899
Cartridge-loading machine .....	G. S. Slocum .....	208, 935	Oct. 15, 1878	529	155	14	571
Cartridge-loading mechanism .....	R. H. Dalzell .....	207, 853	Sept. 10, 1878	288	88, 89	14	359
Cartridge, Metallic .....	C. D. Leet and H. A. Chapin .....	208, 247	Sept. 24, 1878	736	215	14	944
Cartridge-package .....	J. W. Frazier .....	204, 017	May 21, 1878	851	243	13	457
Cartridge-shells, Implement for capping, uncapping, and crimping .....	L. T. Cornell .....	203, 594	May 14, 1878	393	111	13	882
Cartridge-shells, Implement for filling .....	J. Newman .....	200, 149	Feb. 12, 1878	267	80	13	283
Cartridge-shells, Manufacture of .....	T. B. Moore .....	202, 363	Apr. 16, 1878	550	161	13	684
Cartridge, Shot .....	H. H. Schleber .....	210, 566	Dec. 3, 1878	194	51	14	848
Cartridge-trimming machine .....	A. Sessions .....	203, 655	May 14, 1878	450	129	13	889
Cartridge-weighing machine .....	M. McBride .....	209, 824	Nov. 12, 1878	316	94	14	727
Cartridges, Device for loading .....	E. Schenck .....	200, 846	Mar. 5, 1878	34	12	13	420
Cartridges, Implement for capping and uncapping .....	H. A. Kingsland .....	202, 831	Apr. 23, 1878	1067	305	13	758
Cartridges, Machine for gaging .....	J. H. Gill .....	208, 903	Oct. 15, 1878	493	{ 142 143 }	14	566
Carving-fork .....	E. Cady .....	203, 415	May 7, 1878	188	54	13	846
Carving-fork .....	J. W. Gardner .....	201, 663	Mar. 26, 1878	892	272	13	562
Carving-fork .....	J. W. Gardner .....	201, 664	Mar. 26, 1878	892	272	13	562
Carving-fork .....	R. W. Hallam .....	203, 445	May 7, 1878	224	63	13	851
Carving-fork .....	D. Williams .....	208, 354	Sept. 24, 1878	846	247	14	468
Carving-machine .....	M. Rice .....	207, 207	Aug. 20, 1878	584	175	14	286
Carving-machine bit .....	C. F. H. Huff .....	207, 743	Sept. 3, 1878	161	49	14	370
Case:							
See Advertising-case.	Packing-case.						
Bottle-packing case.	Pocket-case.						
Burial-case.	Razor-strop case.						
Carboy-case.	Shipping-case.						
Cigar-case.	Show-case.						
Clock-case.	Thermometer-case.						
Egg-case.	Ticket-case.						
Lunch-case.	Type-case.						
Medicine-case.	Umbrella-case.						
Needle-case.	Violin-case.						
Organ-case.	Watch-case.						
Cask or barrel stand .....	J. Swindells .....	202, 072	Apr. 2, 1878	911	62	13	629
Cask-washing machine .....	A. Muntzenberger and H. M. Underwood .....	200, 470	Feb. 19, 1878	599	176	13	341
Casks, Machine for pitching .....	L. Schreiber .....	204, 456	June 4, 1878	39	13	13	1018
Cast and wrought iron boiler, Combined .....	F. Trump .....	204, 461	June 4, 1878	44	14	13	1019
Caster .....	W. D. Spencer .....	210, 218	Nov. 26, 1878	763	227	14	794
Caster-frame for sewing-machines .....	B. F. Stark .....	203, 789	May 14, 1878	594	166	13	907
Caster, Furniture .....	J. J. Adgate .....	201, 976	Apr. 2, 1878	113	33	13	615
Caster, Furniture .....	J. B. Ritchey .....	199, 313	Jan. 15, 1878	616	179	13	111
Caster, Furniture .....	T. S. Smith .....	201, 842	Mar. 26, 1878	1070	325	13	588
Caster, Sewing-machine .....	B. F. Ryder .....	200, 092	Feb. 5, 1878	203	64	13	205
Caster, Sewing-machine .....	R. Wehrle .....	210, 587	Dec. 3, 1878	217	57	14	851
Caster, Table .....	H. B. and E. B. Beach .....	210, 234	Nov. 26, 1878	782	232	14	796
Casting andirons, Mold for .....	S. E. Jones .....	209, 054	Oct. 15, 1878	666	151	14	588
Casting apparatus .....	J. Duff .....	204, 307	May 28, 1878	1171	334	13	991
Casting car-wheels .....	B. Burgess .....	208, 371	Sept. 24, 1878	863	251	14	470
Casting car-wheels .....	J. Quinn .....	204, 450	June 14, 1878	34	11	13	1017
Casting, Collapsible core for .....	G. Bisset, jr. .....	199, 179	Jan. 15, 1878	485	143	13	92
Casting cranks .....	E. A. L. Roberts .....	209, 836	Nov. 12, 1878	332	99	14	729
Casting door-knobs .....	E. E. Stow .....	205, 219	June 25, 1878	861	254	13	1138
Casting ingot-molds, Core for .....	E. J. Kelly .....	207, 285	Aug. 20, 1878	665	197	14	257
Casting metal, Chill-mold for .....	H. R. Benwell .....	198, 925	Jan. 8, 1878	216	61	13	49
Casting metal, Mold for .....	A. J. Nellis .....	198, 852	Jan. 1, 1878	139	.....	13	29
Casting, Method and apparatus for forming molds for .....	S. J. Adams .....	210, 393	Dec. 3, 1878	3	1	14	825
Casting sash-weights, Mold for .....	E. P. Davis and W. J. Godfrey .....	209, 237	Oct. 22, 1878	869	252	14	621
Casting shaft-couplings, Apparatus for .....	W. H. Elmer .....	208, 363	Sept. 24, 1878	875	254	14	472
Casting stove-leg attachments, Pattern for .....	H. H. Huntley .....	209, 811	Nov. 12, 1878	305	91	14	726
Casting temple-rollers, Mold for .....	J. B. Starnour .....	208, 097	Oct. 15, 1878	596	173	14	579
Casting wheels .....	C. F. and J. B. Mohler .....	200, 326	Feb. 12, 1878	449	132	13	310
Castings, Molding dovetails in metal .....	N. Burdick and J. Easterly .....	204, 129	May 28, 1878	985	280	13	968
Catechismal sack .....	G. Schilling .....	205, 912	July 9, 1878	500	142	14	76
Catechu, Refining and packing .....	E. Wells, A. E. Richardson, W. J. Van Patten, and H. Wells .....	210, 280	Nov. 26, 1878	828	244	14	802
Cattle and sheep, Compound for marking .....	T. Madden .....	206, 889	Aug. 13, 1878	261	.....	14	242
Cattle, Gangway for transferring .....	E. L. and E. Foreman .....	208, 104	Sept. 17, 1878	635	186	14	439
Cattle-guard .....	A. Hallner and J. S. Lindquist .....	207, 963	Sept. 10, 1878	408	123	14	404
Cattle-fio .....	J. E. Littlefield .....	199, 653	Jan. 29, 1878	990	291	13	188
Canterizer .....	F. A. Stohmann and E. Pfarre .....	203, 387	May 7, 1878	160	46	13	842
Ceiling, Fire-proof .....	P. B. Wight .....	202, 617	Apr. 16, 1878	821	237	13	718



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				Spec.	Dr'g.	Vol.	Page.
Celery-tops, Machine for packing	J. C. Telfer	205, 010	June 18, 1878	632	186	13	1103
Ceil-case	J. L. Stevens	200, 103	Feb. 5, 1878	213	56	13	296
Cellar, Water-proof	T. New	206, 351	July 23, 1878	1018	291	14	149
Celluloid and other plastic compositions, Manufacture of sheets of	J. W. Hyatt	199, 908	Feb. 5, 1878	17	5, 6	13	236
Celluloid, &c., Apparatus for coating bars or springs with	J. W. Hyatt and C. Burroughs	204, 229	May 28, 1878	1095	312	13	982
Celluloid, &c., Apparatus for covering cores and forming tubes of	J. W. Hyatt	204, 227	May 28, 1878	1093	312	13	981
Celluloid, &c., Coating articles with	J. W. Hyatt	202, 441	Apr. 16, 1878	627	184	13	696
Celluloid, &c., Manufacture of sheets of	J. W. Hyatt	205, 271	June 25, 1878	911	270	13	1145
Celluloid, &c., Producing tubes and hollow articles from	J. W. Hyatt	204, 228	May 28, 1878	1094	312	13	982
Celluloid, &c., Strip for coating articles with	D. C. Lockwood	205, 880	July 9, 1878	464	132	14	71
Cement	E. Willis	205, 598	July 2, 1878	137		14	27
Cement and asphaltum pipe	M. Allen	203, 869	May 21, 1878	686	195	13	926
Cement and concrete walking-surfaces	T. and T. Hyatt	206, 333	July 23, 1878	1000	{ 284 } 285	14	147
Cement, Manufacture of hydraulic	W. J. Budington	204, 532	June 4, 1878	102		13	1027
Cement, Manufacture of hydraulic	U. Cummings and L. J. Bennett	205, 616	July 2, 1878	155		14	29
Cement, Manufacture of hydraulic	J. Dimelow	205, 253	June 25, 1878	894		13	1142
Cement, mortar coating for walls, &c., Composition for forming	E. Myer	209, 770	Nov. 12, 1878	264		14	720
Cements, clays, metals, and glass in forming illuminated or other gratings, vault-covers, roofs, &c., Application of	T. Hyatt	206, 332	July 23, 1878	993	{ 283 } 284	14	146
Center-board, Adjustable	D. McColgan	208, 750	Oct. 8, 1878	313	90	14	538
Center-board for vessels	L. Read	200, 934	Mar. 5, 1878	111	38	13	432
Center-board for vessels	P. L. Senat	199, 230	Jan. 15, 1878	531	156	13	99
Centrifugal machine	B. T. Babbitt	202, 135	Apr. 9, 1878	295	87	13	645
Centrifugal machine	W. T. Bell and J. Goldsack, jr	210, 657	Dec. 10, 1878	302	82, 83	14	871
Centrifugal machine	G. F. Eisenhardt	202, 251	Apr. 9, 1878	417	122	13	662
Centrifugal machine	P. B. Lawson	204, 834	June 11, 1878	436	128	13	1073
Centrifugal machine	W. H. Tolhurst	199, 125	Jan. 8, 1878	417	122	13	81
Chain and pulley, Driving	J. D. Otstot	201, 698	Mar. 26, 1878	920	281	13	566
Chain, Door	T. F. Stevenson	202, 885	Apr. 23, 1878	1124	323	13	765
Chain, Horse-power	M. Williams	199, 769	Jan. 29, 1878	1106	324	13	265
Chain-link	G. Kampf	206, 335	July 23, 1878	1002	285	14	147
Chain-link for horse-powers	E. A. Smith	206, 273	July 23, 1878	922	261	14	138
Chain-links, Machine for bending	J. F. Busey	207, 388	Aug. 27, 1878	781	232	14	317
Chain-links, Machine for bending	W. B. Conway and W. A. Heald	208, 515	Oct. 1, 1878	58	18	14	497
Chain-links, Machine for forming	J. H. Helm	200, 196	Feb. 12, 1878	313	93	13	239
Chain-lock for valises	J. R. Rheubottom	199, 468	Jan. 22, 1878	776	228	13	145
Chain-making machine	J. J. White	200, 677	Feb. 26, 1878	827	{ 243 } 244	13	383
Chain, Ornamental	H. A. Church	204, 800	June 11, 1878	395	116	13	1069
Chain, Ornamental	J. L. Heeley	199, 542	Jan. 23, 1878	858	251	13	158
Chain, Ornamental	E. Verpillier	201, 135	Mar. 12, 1878	321	98	13	470
Chain-wheel	G. C. Tough	205, 513	July 2, 1878	53	16	14	16
Chains, &c., Machine for forming	A. C. Jordan	200, 195	Feb. 12, 1878	316	94, 95	13	239
Chains, Manufacture of ornamental	J. E. Orry	207, 672	Sept. 3, 1878	89	27	14	309
Chains, Manufacture of sheet-metal	F. Egge	202, 528	Apr. 16, 1878	709	{ 297 } 298 299	13	707
Chair:							
See Adjustable chair.	Opera-chair.						
Arm chair.	Oscillating chair.						
Barber and dental chair.	Railway-chair.						
Child's chair.	Reclining-chair.						
Commode chair.	Rocking-chair.						
Convertible chair.	Safety chair.						
Folding chair.	Sewing-machine chair.						
Folding bracket-chair.	Switch-chair.						
Galvanic chair.	Tilting chair.						
Invalid-chair.	Window-cleaning chair.						
Nursery-chair.							
Chair	J. Ask	202, 505	Apr. 16, 1878	683	201	13	704
Chair	H. Clark	208, 153	Sept. 17, 1878	618	183	14	437
Chair	I. N. Dann and E. Kelsey	205, 059	June 18, 1878	680	{ 199 } 200	13	1109
Chair	W. H. S. Greene and A. Sturdevant	203, 612	May 14, 1878	407	116	13	884
Chair and treadle-power, Combined	J. B. Underwood	209, 842	Nov. 12, 1878	338	101	14	730
Chair back and bottom	F. G. Johnson	210, 426	Dec. 3, 1878	39	9	14	829
Chair-backs, Machine for planing	D. Bullock	206, 660	Aug. 6, 1878	3	1, 2	14	207
Chair-bottom	S. Green	199, 824	Jan. 29, 1878	1160	341	13	213
Chair-bottom	D. F. Haasz	200, 283	Feb. 12, 1878	399	118	13	302
Chair-bottom	S. H. Woodbury and W. T. Gray	207, 789	Sept. 3, 1878	208	64	14	375
Chair-brace	S. P. Sorenson	208, 768	Oct. 8, 1878	335	96	14	541
Chair-leg fastening	J. Scarritt, jr	201, 291	Mar. 12, 1878	481	147	13	493
Chair-pad	P. W. Pratt	207, 680	Sept. 3, 1878	96	29	14	361
Chair seat and back	H. S. Cate	204, 480	June 4, 1878	61	20	13	1021
Chairs, Safeguard for	S. K. Luce	200, 317	Feb. 12, 1878	436	130	13	308
Chamber-vessel	A. M. Rontey	200, 481	Feb. 19, 1878	610	180	13	343
Chandelier, Extension	J. W. Carter	199, 183	Jan. 15, 1878	491	144	13	92
Chandelier, Extension	J. A. Everts	205, 068	June 18, 1878	691	204	13	1111
Chandelier for oil-burners	M. Schmiedel	199, 169	Jan. 15, 1878	474	140	13	90
Chandelier, Oil	F. Rhind	202, 585	Apr. 16, 1878	785	{ 226 } 227	13	714
Chandelier trimming, Glass	J. H. Hobbs	199, 066	Jan. 8, 1878	353	104	13	71
Change-gate	H. C. Speckmann	205, 432	June 25, 1878	1081	320	13	1167
Channeling-tool	E. F. Edgecomb	206, 547	July 30, 1878	1240	357	14	181

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				Spec.	Dr. g.	Vol.	Page.
Char-furnaces, Measuring and discharging apparatus for cooling tubes of.	O. B. Stillman and J. H. Webster.	199, 118	Jan. 8, 1878	410	121	13	80
Charcoal-kilns, Operating	W. A. Miles	200, 662	Feb. 26, 1878	812	239	13	381
Chart, Dress	W. Cromwell	200, 111	Oct. 22, 1878	740	215	14	604
Chatelaine	G. D. Stevens	210, 816	Dec. 10, 1878	465	131	14	893
Check blank, Bank	F. W. Brooks	202, 515	Apr. 16, 1878	694	203 204	13	705
Check book, Bank	H. H. Norrington	203, 365	May 7, 1878	136	39	13	838
Check-cutter, Adjustable	C. C. Carter	208, 713	Oct. 8, 1878	276	78	14	533
Check, draft, &c., Bank	F. W. Brooks	210, 089	Nov. 19, 1878	613	182	14	770
Check-book, Harness	G. A. Allen	206, 518	July 30, 1878	1215	349	14	178
Check-piece for headstalls	J. W. Weed	203, 095	Apr. 30, 1878	1337	389	13	797
Check-row cords, Anchor for	L. L. Haworth	205, 206	June 25, 1878	905	268	13	1144
Check-row cords, Knot for	G. D. Haworth	208, 815	Oct. 8, 1878	387	110	14	548
Check-row wires, Knot for	G. D. Haworth	208, 814	Oct. 8, 1878	387	110	14	548
Check-row wires or cords, Guide for	G. D. Haworth	209, 477	Oct. 29, 1878	1122	327	14	661
Check-rower	A. R. Biddle	205, 466	July 2, 1878	4	2	14	9
Check-rower	E. Ferguson	210, 109	Nov. 19, 1878	634	188	14	773
Check rower and dropper mechanism, Combined	A. M. Black and J. Babcock	199, 020	Jan. 8, 1878	309	91	13	64
Checking apparatus	J. Casey	203, 004	May 21, 1878	837	239	13	945
Cheese-cloth cutter	O. C. Harris	210, 778	Dec. 10, 1878	427	119	14	888
Cheese-cutter	J. N. Parker	200, 472	Feb. 19, 1878	601	177	13	341
Cheese, Manufacture of	E. V. Lapham	200, 547	Feb. 19, 1878	676	199	13	353
Cheese-press, Gang	O. B. Ross	201, 838	Mar. 26, 1878	1065	324	13	587
Cheese-vat	E. B. Smith, G. L. Freeman, and D. H. Burrell.	203, 952	May 21, 1878	778	223	13	938
Cheroot-machine.	A. and J. Marengo	203, 926	May 21, 1878	747	215	13	934
Chest:							
See Flour-chest.							
Chest-developing apparatus	D. J. Mosher	201, 038	Mar. 5, 1878	219	69	13	448
Chicken mother, Artificial	J. Rabenberg	202, 466	Apr. 16, 1878	652	190	13	699
Child's chair	J. Nichols	206, 602	July 30, 1878	1303	375	14	189
Child's chair and carriage.	C. A. Perley	202, 046	Apr. 2, 1878	186	54	13	625
Chill-mold	S. Rogers	207, 552	Aug. 27, 1878	960	281	14	339
Chimney	A. Oelschlegel	209, 579	Nov. 5, 1878	44	12	14	686
Chimney-cap	J. W. Taylor	201, 466	Mar. 19, 1878	676	206	13	527
Chimney-cap or ventilator	P. Mihan	203, 477	May 7, 1878	255	74	13	855
Chimney-cleaner	M. Hoban	206, 789	Aug. 6, 1878	139	43	14	223
Chimney-cowl	J. W. Androvatt	201, 641	Mar. 26, 1878	874	266	13	559
Chimney-cowl	P. A. Dugan	204, 804	June 11, 1878	400	117	13	1069
Chimney-cowl	C. E. Solkey	200, 002	Feb. 5, 1878	107	35	13	250
Chimney, Heating and ventilating	J. Browell	203, 317	May 7, 1878	88	26	13	832
Chimney or ventilator cap or cowl	D. Scott	206, 978	Aug. 13, 1878	338	104	14	251
Chimney top and ventilator.	G. W. and L. Demond	209, 552	Nov. 5, 1878	15	5	14	683
Chimney-ventilator	W. B. Austin	202, 977	Apr. 30, 1878	1226	354	13	782
Chimneys, &c., Ventilating cap for.	A. Barnum	199, 399	Jan. 22, 1878	713	210	13	135
Chin-adjuster	R. S. Ganoung and W. H. Langdon	204, 487	June 4, 1878	65	22	13	1022
China, glassware, &c., Riveting broken articles of.	P. Forrester	207, 265	Aug. 20, 1878	646	192	14	294
Chisel	W. King	204, 439	June 4, 1878	26	9	13	1016
Chisel	O. J. Pennell	201, 284	Mar. 12, 1878	474	145	13	492
Chisel, Turning	H. C. Emery	204, 485	June 4, 1878	64	22	13	1021
Chopper:							
See Cotton-chopper. Stalk-chopper.							
Meat-chopper. Vegetable-chopper.							
Chopping-knife	W. Millsbaugh	209, 065	Oct. 15, 1878	679	195	14	509
Chopping or grinding mill	D. Gartman	208, 678	Oct. 8, 1878	239	68	14	528
Chronometers, Self-adjusting balance for.	H. H. Heinrich	208, 238	Sept. 24, 1878	724	213	14	453
Chuck	H. P. Case	209, 459	Oct. 29, 1878	1106	322	14	658
Chuck	C. Gage	210, 415	Dec. 3, 1878	28	6	14	827
Chuck	M. C. Holmes	202, 260	Apr. 9, 1878	426	124	13	663
Chuck	W. A. Ingalls	206, 113	July 16, 1878	723	208	14	109
Chuck	M. McAnly	207, 882	Sept. 10, 1878	321	98	14	393
Chuck	A. Saunders	204, 254	May 28, 1878	1120	320	13	985
Chuck attachment, Drill and lathe	D. E. Whiton	203, 571	May 14, 1878	373	105	13	879
Chuck, Drill	C. Elterich and A. H. Briggs	207, 113	Aug. 20, 1878	488	147	14	274
Chuck, Drill	G. W. Hayden	206, 320	July 23, 1878	982	279	14	145
Chuck, Drill	E. S. Pierce	210, 875	Dec. 17, 1878	544	153	14	911
Chuck for turning stone, Lathe	E. Rogers	199, 935	Feb. 5, 1878	48	15	13	240
Chuck, Lathe	A. F. Cushman	200, 261	Feb. 12, 1878	378	111	12	209
Chuck, Lathe	W. H. King	209, 897	Nov. 12, 1878	391	117	14	737
Chuck, Lathe stone	J. Evans	203, 436	May 7, 1878	213	61	13	849
Chuck, Watchmaker's lathe	J. E. Lavey	202, 838	Apr. 23, 1878	1074	307	13	759
Churn	W. F. Baird	207, 935	Sept. 10, 1878	389	115	14	400
Churn	C. V. and J. W. Baker	206, 413	July 30, 1878	1103	315	14	164
Churn	W. W. Barrett and A. Smith	204, 124	May 28, 1878	981	279	13	967
Churn	D. H. Benedict	209, 322	Oct. 29, 1878	964	281	14	658
Churn	G. W. Blackwill	208, 707	Oct. 8, 1878	269	77	14	532
Churn	G. A. Blanchard	204, 418	June 4, 1878	5	2	13	1013
Churn	C. C. Briant	201, 739	Mar. 26, 1878	966	295	13	573
Churn	H. Brown	209, 605	Nov. 5, 1878	73	21	14	690
Churn	N. B. Brown	205, 045	June 18, 1878	668	196	13	1107
Churn	S. M. Brown	210, 090	Nov. 19, 1878	614	182	14	770
Churn	B. Clark	203, 419	May 7, 1878	191	55	13	846
Churn	L. Cutshaw	203, 008	May 21, 1878	840	240	13	946
Churn	H. T. Davis	198, 797	Jan. 1, 1878	80	21	13	20
Churn	S. B. Donaldson	205, 620	July 2, 1878	161	48	14	30
Churn	C. Farmer	200, 997	Mar. 5, 1878	177	56	13	442
Churn	J. H. Polliott	209, 033	Oct. 15, 1878	637	184	14	585
Churn	B. Gue	208, 109	Sept. 17, 1878	639	188	14	439
Churn	C. Guxer	206, 559	July 30, 1878	1257	362	14	184
Churn	N. C. Harris	206, 443	July 30, 1878	1134	325	14	168
Churn	H. R. Height	207, 737	Sept. 3, 1878	155	47, 48	14	369
Churn	J. M. Hill	199, 547	Jan. 22, 1878	862	252	13	159
Churn	H. F. Hogan	207, 276	Aug. 20, 1878	657	195	14	295
Churn	M. A. Howe	203, 047	Apr. 30, 1878	1293	375	13	791

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Churn	W. Howland	205,388	June 25, 1878	1039	308	13	1161
Churn	J. Huebenthal	201,528	Mar. 10, 1878	739	225 226	13	536
Churn	T. A. Irick	207,037	Aug. 13, 1878	396	123	14	259
Churn	S. Kreiter	204,582	June 4, 1878	153	50	13	1035
Churn	W. Magee	203,170	Apr. 30, 1878	1421	414	13	808
Churn	J. E. Marquis	210,344	Nov. 26, 1878	901	264	14	811
Churn	A. G. McBrayer and F. G. Thomas	209,767	Nov. 12, 1878	262	78	14	739
Churn	J. A. and W. V. McConnell	198,606	Jan. 1, 1878	88	24	13	22
Churn	S. N. Millivee	205,887	July 9, 1878	471	134	14	72
Churn	O. O. Moore	201,438	Mar. 10, 1878	649	198	13	525
Churn	G. R. Moberger	210,800	Dec. 10, 1878	450	127	14	891
Churn	J. Rehbein	203,193	Apr. 30, 1878	1442	421	13	810
Churn	W. Seuchrist	209,195	Oct. 22, 1878	831	240	14	616
Churn	A. B. Simpson	203,083	Apr. 30, 1878	1327	386	13	796
Churn	J. G. Taylor	198,909	Jan. 1, 1878	191	54	13	38
Churn	R. M. Thaler	206,645	July 30, 1878	1347	387	14	194
Churn	J. C. Tise and J. H. Kester	207,085	Aug. 13, 1878	441	136	14	264
Churn	E. W. Trow	206,508	July 30, 1878	1205	346	14	177
Churn	B. I. Williams	207,581	Aug. 27, 1878	1000	292	14	345
Churn and device for operating the same, Revolving-box.	E. P. Conser	200,897	Mar. 5, 1878	80	28	13	427
Churn and washing machine	G. B. Richards	209,922	Nov. 12, 1878	418	125	14	741
Churn, Atmospheric	S. R. Owen and F. M. Mahan	206,124	July 16, 1878	737	211	14	110
Churn attachment, Reciprocating	S. D. Saxby	205,687	July 2, 1878	239	71	14	39
Churn-dasher	O. P. Ahlgren	207,379	Aug. 27, 1878	773	230	14	316
Churn-dasher	W. B. Allen	200,442	Oct. 29, 1878	1087	317	14	656
Churn-dasher	J. E. Finley	205,740	July 9, 1878	812	92	14	52
Churn-dasher	C. Friedeborn	207,652	Sept. 3, 1878	71	21	14	358
Churn-dasher	G. W. Gilbert	203,134	Apr. 30, 1878	1379	401	13	805
Churn-dasher	H. L. Heaton	203,730	May 14, 1878	529	150	13	699
Churn-dasher	M. F. Mitchel	208,533	Oct. 1, 1878	77	23	14	499
Churn-dasher	W. B. Mumbrue	207,888	Sept. 10, 1878	328	99	14	394
Churn-dasher	J. W. Tatam	208,212	Sept. 17, 1878	682	201	14	445
Churn-dasher, Reciprocating	M. R. Heliker	200,194	Feb. 12, 1878	811	93	13	289
Churn-dasher, Reciprocating	W. W. Primm	199,742	Jan. 29, 1878	1080	317	13	209
Churn-dasher, Rotary	S. B. Rathbun	201,287	Mar. 12, 1878	477	146	13	492
Churn-dasher, Rotary	G. Sprague	159,474	Jan. 22, 1878	783	230	13	146
Churn-dashers, Device for operating reciprocating	J. H. Lawrence	199,836	Jan. 29, 1878	1172	344	13	214
Churn-motor	J. A. Alexander	206,520	July 30, 1878	1216	350	14	178
Churn-motor	G. W. Jones	204,049	May 21, 1878	879	252	13	651
Churn-motor	W. A. Morgan	204,071	May 21, 1878	903	258	13	934
Churn-motor	H. A. Turner	210,580	Dec. 3, 1878	211	65	14	851
Churn-operating machine	J. E. and J. B. Vail	205,983	July 16, 1878	589	169	14	92
Churn-power	A. W. Decker	200,988	Mar. 5, 1878	163	53	13	449
Churn, Reciprocating	J. E. Gibbs	209,249	Oct. 22, 1878	878	255	14	623
Churn, Reciprocating	J. T. Irick	200,306	Feb. 12, 1878	422	126	13	306
Churn, Reciprocating	N. B. Osgood	201,025	Mar. 26, 1878	857	261	13	556
Churn, Reciprocating	L. B. Wilson	208,941	Oct. 15, 1878	534	167	14	572
Churn, Revolving	B. B. Hess	200,531	Feb. 19, 1878	658	194	13	359
Churn, Rotary	W. F. Baird	208,783	Oct. 8, 1878	348	160	14	542
Churn, Rotary	M. S. Bazemore	208,705	Oct. 8, 1878	267	70	14	532
Churn, Rotary	J. T. Fry	208,587	Oct. 1, 1878	135	39	14	567
Churn, Rotary	S. Leslie and J. A. Lyon	210,205	Nov. 26, 1878	751	223	14	792
Churn, Rotary	J. Schwickhard	206,045	July 16, 1878	647	188	14	109
Churn, Rotary	L. Whitney	201,900	Apr. 2, 1878	41	11	13	605
Churn, Rotary box	C. Isbell and E. C. Taylor	198,802	Jan. 1, 1878	85	23	13	21
Churn, Vibrating	S. Mellon	208,751	Oct. 8, 1878	318	91	14	538
Churn with swinging body and reciprocating dasher.	S. Kreiter	202,554	Apr. 16, 1878	756	218	13	711
Churn with vibrating dasher, Rocking	N. Bowen	201,633	Mar. 26, 1878	866	263	13	557
Churns, Device for use in reciprocating	J. Forsyth	200,271	Feb. 12, 1878	390	115	13	301
Churns, Folding stand for rotary	J. McAnespey	200,403	Feb. 19, 1878	534	158	13	331
Churns, Motor of operating	T. J. Crump	199,187	Jan. 15, 1878	494	145	13	43
Churns, Securing rotary dashers in	J. McAnespey	199,657	Jan. 29, 1878	1002	292	13	188
Churning apparatus	A. Beck	205,521	July 2, 1878	60	18	14	17
Churning apparatus	W. H. Foster and I. C. Roberts	209,392	Oct. 29, 1878	1035	301	14	648
Churning apparatus	A. N. Myers	204,241	May 28, 1878	1108	316	13	983
Churning apparatus	J. A. Perry	204,245	May 28, 1878	1111	317	13	984
Churning apparatus	S. S. Zahm	207,233	Aug. 20, 1878	610	183	14	289
Cider-mill	J. L. Barnes	207,001	Aug. 13, 1878	364	111	14	255
Cider-mill	R. Eason	208,723	Oct. 8, 1878	284	81, 82	14	534
Cider mill and press combined	D. A. Smith	206,630	July 30, 1878	1327	382	14	192
Cigar	J. Frey	203,537	May 14, 1878	337	96	13	875
Cigar-box	S. H. Howlett	204,040	May 21, 1878	871	249	13	950
Cigar-box	M. Jonas	208,604	Oct. 1, 1878	150	44	14	569
Cigar-box	L. Kaufmann	199,719	Jan. 29, 1878	1059	310	13	197
Cigar-box	I. Popper	206,824	Aug. 6, 1878	169	53	14	227
Cigar-box	F. A. Titcomb	204,634	June 4, 1878	210	67	13	1042
Cigar-bundler and binder	G. W. Rhymearson	205,309	June 25, 1878	943	289	13	1149
Cigar-bundling apparatus	W. A. Abbott	203,867	May 21, 1878	684	195	13	926
Cigar-cap	J. T. Emerick	207,858	Sept. 10, 1878	293	90	14	399
Cigar-case	O. Hammerstein	205,482	July 2, 1878	19	6	14	11
Cigar-case	S. Heilbronner	209,478	Oct. 29, 1878	1123	328	14	661
Cigar-cutter, Pocket	L. H. Lipman	202,559	Apr. 16, 1878	761	220	13	712
Cigar-ends, Device for splitting	W. Wender, A. Vogt, and R. Richter	208,871	Oct. 8, 1878	451	130	14	556
Cigar-holder	W. Goodwin	210,022	Nov. 19, 1878	542	162	14	760
Cigar-lighter	I. N. Clawson	202,150	Apr. 9, 1878	309	92	13	647
Cigar-lighter	J. M. Keop	206,577	July 30, 1878	1279	367	14	186
Cigar-lighter	G. Selden	206,835	Aug. 6, 1878	181	57	14	239
Cigar-lighter	H. Wellington and W. Bourke	203,805	May 14, 1878	611	170 171	13	908
Cigar-lighter and match-safe combined	H. Monk	204,593	June 4, 1878	164	53	13	1036
Cigar-machine	R. A. Bright, jr	202,628	Apr. 23, 1878	849	244	13	732
Cigar-machine	F. Haehncl	209,054	Feb. 5, 1878	164	53	13	250

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Cigar-machine.....	R. Roberts .....	205,809	July 9, 1878	391	112	14	62
Cigar-machine.....	R. Roberts .....	210,632	Dec. 10, 1878	276	75	14	869
Cigar-maker's knife.....	F. W. and C. Hoffmann.....	208,315	Sept. 24, 1878	807	235	14	463
Cigar-mold.....	N. Du Brul .....	203,715	May 14, 1878	516	146	13	897
Cigar-mold.....	G. W. Hamilton .....	201,775	Mar. 26, 1878	1004	307	13	579
Cigar mold and press.....	F. C. Miller .....	208,414	Sept. 24, 1878	966	265	14	476
Cigar-package.....	P. Cauhapé .....	201,160	Mar. 12, 1878	344	106	13	474
Cigar-package.....	M. Jonas .....	205,273	June 25, 1878	913	270	13	1145
Cigar-packer press.....	N. Du Brul .....	205,065	June 18, 1878	687	201	13	1110
Cigar-perforator and match-box.....	W. B. Conway .....	210,501	Dec. 3, 1878	115	30	14	839
Cigar-pipe.....	J. G. McCarter .....	201,031	Mar. 5, 1878	212	66	13	447
Cigar-press.....	J. W. Sursu .....	210,062	Nov. 19, 1878	581	174	14	766
Cigar-slitter.....	M. Dillmeier .....	200,387	Oct. 29, 1878	1032	300	14	647
Cigar-support.....	F. L. Oviatt .....	200,083	Feb. 5, 1878	195	62	13	263
Cigar-tip cutter.....	G. Ohmer .....	204,074	May 21, 1878	965	259	13	954
Cigar-tip protector.....	C. R. Becker .....	206,921	Aug. 13, 1878	289	88	14	245
Cigar-tuck protector.....	G. E. Gumpert .....	204,815	June 11, 1878	411	120	13	1071
Cigar-wrapper cutter.....	F. Haelmel .....	200,055	Feb. 5, 1878	466	53	13	259
Cigar-wrappers, Device for forming.....	O. A. Bishop .....	200,889	Mar. 5, 1878	73	25	13	426
Cigars, &c., in packing-boxes, Press for compressing.....	F. X. Osburg .....	199,900	Feb. 5, 1878	97	32	13	248
Cigars, Presser for marking.....	G. G. Bild .....	201,088	Mar. 12, 1878	271	84	13	463
Cigarette.....	G. E. Bovee .....	205,345	June 25, 1878	907	295	13	1156
Cigarette.....	C. G. Emery .....	200,859	Mar. 5, 1878	44	.....	13	422
Cigarette.....	J. Gordon .....	198,977	Jan. 8, 1878	267	77	13	27
Cigarette.....	A. Pearl .....	206,819	Aug. 6, 1878	163	52	14	227
Cigarette for medical purposes.....	D. Wark .....	203,861	May 21, 1878	680	153	13	925
Cigarette-holder.....	J. R. Villasona .....	205,818	July 9, 1878	401	115	14	63
Cigarette mouth-piece.....	A. B. Citroen .....	205,475	July 2, 1878	12	4	14	10
Cigarette-package.....	C. G. Emery .....	206,668	Aug. 6, 1878	10	4	14	268
Cigarette-package.....	F. S. Kinney .....	203,164	Apr. 30, 1878	1414	412	13	807
Clamp:							
See Bed-clothes clamp. Hoisting-clamp.							
Bit-clamp. Hose-clamp.							
Book-clamp. Jointer-clamp.							
Brake-shoe clamp. Picture-frame clamp.							
Collar-clamp. Rope-clamp.							
Crane-clamp. Sewing-machine-needle clamp.							
Dental rubber dam-clamp. Washing-machine clamp.							
Emery-wheel clamp. Well-tube clamp.							
Flooring-clamp.							
Clamp.....	H. W. Atwater.....	206,851	Aug. 13, 1878	214	69	14	237
Clamp.....	E. F. Gordon .....	201,407	Mar. 19, 1878	622	190	13	519
Clamp.....	C. M. Hyatt .....	211,020	Dec. 17, 1878	717	198	14	932
Clamp.....	D. Rockwell and N. Doty.....	198,754	Jan. 1, 1878	26	6	13	12
Clamp and soldering apparatus combined.....	G. H. Perkins .....	206,193	July 23, 1878	832	237	14	126
Clamp and soldering apparatus combined.....	G. H. Perkins .....	206,194	July 23, 1878	833	237	14	126
Clamp for holding bolts from turning.....	J. W. Leete .....	206,954	Aug. 13, 1878	317	97	14	249
Clasp:							
See Corset-clasp. Pencil-clasp.							
Garment-supporting Pocket-clasp.							
clasp. Stocking-supporting clasp.							
Pen and pencil clasp. Suspender-clasp.							
Clasp.....	F. Armstrong.....	205,334	June 25, 1878	985	291	13	1154
Clasp.....	F. B. Brown .....	202,924	Apr. 30, 1878	1177	339	13	776
Clasp.....	F. B. Brown .....	206,388	July 30, 1878	1076	307	14	161
Clasp.....	F. B. Brown .....	210,665	Dec. 10, 1878	311	85	14	873
Clasp.....	A. Christy .....	198,929	Jan. 8, 1878	221	62	13	49
Clasp.....	A. Christy .....	204,567	June 4, 1878	107	36	13	1027
Clasp.....	J. R. Schoals .....	208,270	Sept. 24, 1878	763	223	14	458
Clasp.....	T. P. Taylor .....	208,998	Oct. 15, 1878	597	173	14	580
Clasp.....	P. F. Tunny .....	207,694	Sept. 3, 1878	109	33	14	363
Clasp and buckle, Combined.....	J. R. Judd .....	200,658	Feb. 26, 1878	810	238	13	381
Clasp for securing ribbons on rolls.....	H. G. and C. G. Hubert.....	204,224	May 28, 1878	1099	311	13	981
Clay and other plastic materials, Machine for making plates of.....	L. Brandies .....	208,363	Sept. 24, 1878	857	249	14	470
Clay for furnaces, crucibles, fire-bricks, &c., Preparing fire.....	T. Fletcher .....	208,302	Sept. 24, 1878	795	.....	14	462
Clay sawing and pulverizing machine.....	W. T. Duvall .....	202,337	Apr. 16, 1878	525	154	13	681
Clay tubular bodies and forming collars thereon, Machine for enlarging the ends of.....	G. D. Goodrich .....	200,791	Feb. 26, 1878	938	{ 276 277 }	{ 13 13 }	400
Cleaner:							
See Boiler-cleaner. Gun-cleaner.							
Carpet-cleaner. Horse-cleaner.							
Corn and grain cleaner. Knife-cleaner.							
cleaner. Mud-pipe cleaner.							
Cotton-cleaner. Pea-nut cleaner.							
File-cleaner. Saw-cleaner.							
Flue-cleaner. Steam-boiler cleaner.							
Grain-cleaner. Tube-cleaner.							
Grain-drill cleaner. Window-cleaner.							
Cleansing and scouring device.....	C. Raetz .....	205,299	June 25, 1878	942	279	13	1148
Clevis.....	W. Kenney .....	199,073	Jan. 8, 1878	359	106	13	72
Clevis.....	C. F. Search .....	208,042	Sept. 17, 1878	506	{ 150 151 }	{ 14 14 }	421
Clevis-bolt.....	H. M. Willis .....	207,375	Aug. 27, 1878	768	229	14	315
Clew-line leader.....	S. R. Brooks .....	204,290	May 28, 1878	1154	330	13	989
Clinometer.....	L. C. Schnell .....	199,319	Jan. 15, 1878	623	181	13	113
Clip:							
See Saddle-clip. Vehicle-spring clip.							
Vehicle-clip. Yoke-clip.							
Cloaks, Stand for showing.....	P. H. O'Hara .....	209,917	Nov. 12, 1878	412	123	14	740
Clock-calendar.....	C. B. Bryant and A. D. Hendrick.....	209,453	Oct. 29, 1878	1099	320	14	657
Clock-calendar.....	A. M. Carlsen .....	209,458	Oct. 29, 1878	1104	321	14	658



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Clock-calendar .....	B. B. Lewis .....	209,618	Nov. 5, 1878	88	26	14	692
Clock, Calendar .....	T. H. Mott .....	210,704	Dec. 10, 1878	347	95	14	877
Clock .....	G. H. Blakesley .....	205,037	June 18, 1878	658	194	13	1106
Clock .....	H. J. and W. D. Davies .....	202,795	Apr. 23, 1878	1022	293	13	753
Clock .....	A. I. Goodrich .....	199,198	Jan. 8, 1878	503	148	13	95
Clock .....	H. W. Ley .....	202,275	Apr. 9, 1878	443	129	13	695
Clock-case .....	M. Bock .....	208,563	Oct. 1, 1878	108	32	14	509
Clock-case .....	H. J. Davies .....	202,095	Apr. 9, 1878	252	74	13	639
Clock-case .....	G. and D. B. Hills .....	204,328	May 28, 1878	1193	340	12	994
Clock-case .....	J. H. Welch .....	208,216	Sept. 17, 1878	688	202	14	445
Clock-cases, Manufacture of .....	N. Allen .....	200,596	Feb. 26, 1878	742	217	13	371
Clock, Cosmographic .....	C. Hénard and E. Lasnier .....	200,840	Mar. 5, 1878	16	6, 7	13	417
Clock-dial .....	H. J. and W. D. Davies .....	209,869	Nov. 12, 1878	367	109	14	734
Clock-dial .....	S. E. Root .....	210,806	Dec. 10, 1878	456	128	14	892
Clock-face .....	G. Ager .....	206,411	July 30, 1878	1101	315	14	164
Clock, Illuminated .....	C. Maynard .....	208,478	Oct. 1, 1878	25	8	14	492
Clock-movement .....	A. E. Hotchkiss .....	200,534	Feb. 19, 1878	661	195	13	530
Clock-movements, Lock-work for .....	A. L. Atwood .....	208,702	Oct. 8, 1878	264	75	14	532
Clock, Pendulum .....	H. J. and W. D. Davies .....	199,804	Jan. 29, 1878	1143	335	13	210
Clock-regulator, Electric .....	G. Lund .....	210,133	Nov. 19, 1878	658	196	14	779
Clock, Repeating .....	H. Thompson .....	204,175	May 28, 1878	1033	{ 294 295 }	13	974
Clock, Striking .....	V. Himmer .....	209,616	Nov. 5, 1878	86	26	14	692
Clock striking attachment .....	D. C. Wolf .....	209,098	Oct. 15, 1878	712	206	14	505
Clock striking mechanism .....	H. W. Porter .....	208,333	Sept. 24, 1878	824	241	14	466
Clock striking-movement .....	W. D. Davies and F. A. Lambert .....	200,518	Feb. 19, 1878	641	189	13	348
Clock striking-movement .....	H. D. Northrop .....	200,564	Feb. 19, 1878	691	203	13	355
Clock, Tell-tale .....	R. Boeklen .....	199,181	Jan. 15, 1878	487	143	13	92
Clock, Time-registering .....	Z. M. Lane and W. S. Hill .....	210,788	Dec. 10, 1878	436	{ 121 122 }	14	889
Clocks, Actuating mechanism for calendar .....	W. S. Shirk .....	204,508	June 4, 1878	81	28	13	1024
Clocks and watches, Calendar dial for .....	W. D. McGloghlon .....	200,212	Feb. 12, 1878	326	98	13	292
Clocks, Electro-magnetic apparatus for synchronizing .....	J. A. Lund .....	201,185	Mar. 12, 1878	366	114	13	477
Clocks, Lock-work attachment for .....	J. Connor .....	210,755	Dec. 10, 1878	403	110	14	884
Clocks, Pendulum adjustment for .....	H. C. Grawe .....	203,263	May 7, 1878	27	9	13	824
Clod-crusher .....	D. Locke .....	205,969	July 16, 1878	572	163	14	90
Clod-crusher .....	C. R. Polen, sr .....	204,247	May 28, 1878	1113	317	13	984
Clodset:							
See Dry closet.	Portable closet.						
Earth-closet.	Water-closet.						
Odorless closet.							
Cloth-drying machine .....	T. Goodall .....	205,377	June 25, 1878	1028	304	13	1159
Cloth-drying machine .....	J. S. Winsor .....	207,329	Aug. 20, 1878	704	210	14	302
Cloth-finishing machine .....	A. Brown .....	206,767	Aug. 6, 1878	110	35	14	220
Cloth-finishing machine .....	E. T. Marble .....	205,281	June 25, 1878	920	273	13	1146
Cloth-finishing machine .....	D. C. Sumner .....	203,888	May 7, 1878	161	46	13	842
Cloth-folding machine .....	L. J. Boillot .....	210,486	Dec. 3, 1878	96	25	14	836
Cloth-folding machine .....	A. Warth .....	206,651	July 30, 1878	1355	389	14	195
Cloth, Giggling-machine for napping .....	C. Woelfel and J. Massey .....	200,784	Feb. 26, 1878	932	274	13	399
Cloth, Machine for giggling designs on .....	M. Strakosch .....	205,815	July 9, 1878	397	114	14	63
Cloth-pressing machine .....	E. Gessner .....	206,718	Aug. 6, 1878	62	20	14	214
Cloth-pressing machine .....	W. Hebdon .....	205,085	June 18, 1878	708	210	13	1113
Cloth, Process and apparatus for finishing .....	H. Hebdon .....	201,112	Mar. 12, 1878	297	91	13	467
Cloth-shearing machine .....	A. A. Forbes .....	199,970	Feb. 5, 1878	79	26	13	245
Cloth-shearing machines, Rest for .....	A. Woolson .....	207,090	Aug. 13, 1878	446	{ 137 138 }	13	265
Cloth-shearing machines, Rest for .....	A. Woolson .....	207,091	Aug. 13, 1878	449	138	13	265
Cloth-shearing machines, Rest for .....	A. Woolson .....	207,092	Aug. 13, 1878	450	138	13	265
Cloth-shearing machines, Rest for .....	E. Woolson .....	207,929	Sept. 10, 1878	374	113	14	399
Cloth sponging and drying machine .....	M. C. Swift .....	206,499	July 30, 1878	1197	343	14	176
Cloth stretching and drying machine .....	D. Babcock .....	209,212	Oct. 22, 1878	848	245	14	618
Cloth-stretching machine .....	G. D. King .....	205,489	July 2, 1878	26	8, 9	14	12
Cloth, Water-proof .....	F. and W. F. Brigham, S. M. Hewitt, and W. F. Prusha .....	209,450	Oct. 29, 1878	1006	.....	14	637
Clothes-boiler and washing-machine, Convertible .....	J. B. Franklin .....	205,250	June 25, 1878	899	266	12	1143
Clothes-drier .....	J. Benstine and C. H. Osborn .....	207,586	Sept. 3, 1878	3	1, 2	14	349
Clothes-drier .....	L. C. Cattell .....	199,958	Feb. 5, 1878	68	22	13	244
Clothes-drier .....	E. O. Darling .....	202,002	Apr. 2, 1878	139	40	13	619
Clothes-drier .....	P. Dunbar .....	204,658	June 11, 1878	242	76	13	1050
Clothes-drier .....	A. A. Heaton .....	209,121	Oct. 22, 1878	754	219	14	606
Clothes-drier .....	O. Huff .....	203,543	May 14, 1878	342	98	13	876
Clothes-drier .....	J. J. Largent .....	205,106	June 18, 1878	725	216	13	1115
Clothes-drier .....	B. G., H. C., and E. O. Miller .....	201,816	Mar. 26, 1878	1042	318	13	584
Clothes-drier .....	J. K. Miller .....	199,731	Jan. 29, 1878	1071	313	13	199
Clothes-drier .....	W. K. Morgan .....	203,484	May 7, 1878	261	75	13	856
Clothes-drier .....	N. Scarritt .....	205,581	July 2, 1878	124	37	14	26
Clothes-drier .....	W. F. Wilson .....	204,179	May 28, 1878	1039	296	13	975
Clothes-fork .....	W. H. Castle .....	209,957	Nov. 19, 1878	470	142	14	751
Clothes-line fastener .....	J. P. Boesen .....	210,658	Dec. 10, 1878	303	83	14	872
Clothes-line holder .....	G. S. Sayers and T. Galligan .....	203,503	May 7, 1878	278	80	13	859
Clothes-line holder .....	J. W. Turner .....	207,224	Aug. 20, 1878	602	181	14	249
Clothes-line reel .....	F. Heavener .....	210,532	Dec. 3, 1878	155	41	14	843
Clothes-line stretcher .....	W. T. Keefer .....	209,814	Nov. 12, 1878	308	92	14	728
Clothes-line tightener .....	S. Conner .....	202,634	Apr. 23, 1878	857	246	13	732
Clothes-pin .....	H. L. Clark and A. B. Smith .....	202,704	Apr. 23, 1878	932	266	13	740
Clothes-pin .....	S. L. Hotchkiss .....	200,299	Feb. 12, 1878	416	124	13	305
Clothes-pin .....	M. Warren .....	204,927	June 18, 1878	555	161	13	1092
Clothes-pin, Self-locking .....	S. B. Lucas .....	209,409	Oct. 29, 1878	1050	305	14	659
Clothes-pounder .....	W. E. Armstrong and D. Giesman .....	201,642	Mar. 26, 1878	874	266	13	559
Clothes-pounder .....	J. S. Brown .....	203,532	May 14, 1878	332	94	13	874
Clothes-pounder .....	M. P. Colvin .....	199,696	Jan. 29, 1878	1038	303	13	194
Clothes-pounder .....	M. P. Colvin .....	202,792	Apr. 23, 1878	1018	292	13	732
Clothes-pounder .....	W. P. Dungan, jr .....	203,430	May 7, 1878	206	59	13	848



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Clothes-pounder.....	W. P. Dungan, jr.....	209, 230	Oct. 22, 1878	871	253	14	622
Clothes-pounder.....	R. A. Eddy.....	200, 902	Mar. 5, 1878	85	29	13	428
Clothes-pounder.....	A. Gummer.....	210, 024	Nov. 19, 1878	544	163	14	761
Clothes-pounder.....	S. Knight.....	201, 926	Apr. 2, 1878	66	18	13	608
Clothes-pounder.....	O. Schindler.....	204, 379	May 28, 1878	1248	355	13	1001
Clothes-pounder.....	G. M. Smith.....	204, 101	May 21, 1878	937	268	13	958
Clothes-pounder.....	F. A. Sumner.....	199, 942	Feb. 5, 1878	54	18	13	241
Clothes-pounder.....	H. Trumbull.....	200, 008	Feb. 5, 1878	111	37	13	251
Clothes-pounder.....	G. W. Wood.....	200, 116	Feb. 5, 1878	228	70	13	268
Clothes-rack.....	S. Reed.....	207, 132	Aug. 20, 1878	507	153	14	277
Clothes-rack.....	J. Wing.....	210, 177	Nov. 19, 1878	703	209	14	782
Clothes-sprinkler.....	J. E. New.....	203, 187	Apr. 30, 1878	1436	419	13	810
Clothes-sprinkler.....	D. Whittaker.....	262, 616	Apr. 16, 1878	820	237	13	718
Clothes-washer.....	G. A. Crooker.....	208, 798	Oct. 8, 1878	371	105	14	545
Clothes-washer.....	N. H. Long.....	199, 455	Jan. 22, 1878	766	224	13	143
Clothes-washer.....	W. Patterson.....	205, 500	July 2, 1878	37	12	14	14
Clothes-washer, Atmospheric.....	A. A. Brooks and H. D. Crooker.....	204, 880	June 18, 1878	504	147	13	1086
Clothes-wringer.....	S. Arnold.....	201, 902	Apr. 2, 1878	44	12	13	605
Clothes-wringer.....	C. B. Camp and N. Gardner.....	203, 116	Apr. 30, 1878	1357	805	13	800
Clothes-wringer.....	W. Hill.....	203, 621	May 14, 1878	414	118	13	885
Clothes-wringer.....	H. E. Smith.....	204, 850	June 11, 1878	449	131	13	1075
Clothes-wringer.....	H. E. Smith.....	204, 851	June 11, 1878	450	131	13	1075
Clothes-wringer.....	T. R. Way.....	203, 803	May 14, 1878	809	170	13	908
Clothes-wringer.....	J. Young.....	209, 360	Oct. 29, 1878	1016	205	14	645
Clover-separator.....	W. Soggs.....	203, 788	May 14, 1878	593	166	13	907
Clutch.....	F. G. Bates.....	206, 071	July 16, 1878	674	195	14	103
Clutch.....	F. G. Bates.....	206, 072	July 16, 1878	675	195	14	103
Clutch.....	J. E. Hunter.....	211, 019	Dec. 17, 1878	715	197	14	932
Clutch.....	R. W. Johnson.....	204, 977	June 18, 1878	602	176	13	1098
Clutch.....	H. A. Remington.....	208, 494	Oct. 1, 1878	39	12	14	494
Clutch for foot-powers, Friction.....	A. Hoefler and A. Senef.....	209, 395	Oct. 29, 1878	1038	302	14	648
Clutch, Friction.....	H. Barnes.....	202, 400	Apr. 16, 1878	584	172	13	089
Clutch, Friction.....	L. D. Dana.....	205, 362	June 25, 1878	1014	800	13	1157
Clutch mechanism.....	G. Crompton.....	200, 375	Feb. 19, 1878	507	150	13	327
Clutching device.....	H. Fuchs.....	201, 105	Mar. 12, 1878	288	89	13	466
Coal and potato screen.....	W. Van Houten.....	202, 306	Apr. 9, 1878	473	138	13	670
Coal and rock drilling machine.....	D. McMurtre.....	199, 377	Jan. 22, 1878	689	202	13	131
Coal-breaker.....	G. B. Markle.....	201, 187	Mar. 12, 1878	368	115	13	478
Coal-breaker.....	J. B. Miller.....	201, 817	Mar. 26, 1878	1043	318	13	584
Coal-drill.....	J. J. Rigney and W. Hemingray.....	200, 936	Mar. 5, 1878	114	38	13	433
Coal-drilling machine.....	J. Price.....	202, 372	Apr. 16, 1878	560	164	13	686
Coal-hod.....	J. Pfeiffer.....	206, 127	July 16, 1878	741	212	14	111
Coal-hod.....	H. S. Reynolds.....	206, 614	July 30, 1878	1315	378	14	190
Coal preparatory to burning, Compound for treating.....	M. R. Eaton.....	208, 011	Sept. 17, 1878	472	.....	14	417
Coal, Purifying.....	P. F. Morey.....	200, 663	Feb. 26, 1878	813	.....	13	822
Coal-scuttle.....	S. Smith.....	210, 072	Dec. 17, 1878	663	183	14	926
Coal-duster.....	A. P. Silva.....	200, 226	Feb. 12, 1878	341	102	13	294
Coal-facing.....	M. C. Swift.....	207, 629	Sept. 3, 1878	45	14	14	355
Cock and box for water-pipes, Stop.....	P. Connolly.....	201, 906	Apr. 2, 1878	134	39	13	618
Cock and faucet.....	C. Verniaud.....	199, 944	Feb. 5, 1878	50	18	13	242
Cock casing, Stop.....	P. Burke.....	207, 246	Aug. 20, 1878	620	187	14	291
Cock, Cylinder.....	G. F. Hammer.....	202, 167	Apr. 9, 1878	334	98	13	650
Cock, Cylinder.....	J. Ryan.....	209, 518	Oct. 29, 1878	1169	{ 339 340 }	14	667
Cock for beer-fermenting casks, Vent.....	T. F. Straub.....	208, 771	Oct. 8, 1878	338	97	14	541
Cock for steam-boilers, Stop.....	J. L. Heald.....	200, 453	Feb. 19, 1878	582	172	13	338
Cock, Gage.....	C. J. Elliott.....	202, 639	Apr. 23, 1878	864	247	13	733
Cock, Gage.....	A. H. Jarecki.....	200, 396	Feb. 19, 1878	528	156	13	330
Cock, Gage.....	E. B. Kunkle.....	209, 810	Nov. 12, 1878	310	92	14	726
Cock, Gage.....	D. C. Lyons.....	206, 030	July 16, 1878	632	183	14	98
Cock, Gage.....	J. J. Tonkin.....	205, 152	June 18, 1878	778	230	13	1122
Cock, Hot, cold, and waste water.....	W. D. Abbott.....	209, 539	Nov. 5, 1878	1	1	14	681
Cock or valve, Stop.....	C. C. Bliss.....	202, 982	Apr. 30, 1878	1232	350	13	783
Cock, Regulating.....	W. R. Park.....	201, 690	Mar. 26, 1878	921	282	13	506
Cock, Reverse-way.....	E. B. Quick.....	205, 209	June 25, 1878	847	251	13	1136
Cock, Steam.....	G. H. Crosby.....	208, 061	Oct. 15, 1878	560	163	14	575
Cock, Steam.....	J. Dowling.....	206, 037	Aug. 13, 1878	302	92	14	247
Cock, Steam-boiler gage.....	D. Jenkins.....	203, 736	May 14, 1878	537	152	13	900
Cock, Steam-boiler gage.....	H. R. Morse.....	209, 913	Nov. 12, 1878	407	122	14	739
Cock, Stop.....	G. A. Fischer.....	210, 454	Dec. 3, 1878	68	17	14	833
Cock, Stop.....	J. Hills.....	208, 313	Sept. 24, 1878	805	235	14	463
Cock, Stop.....	G. N. Munger.....	204, 162	May 28, 1878	1023	291	13	973
Cock, Water.....	M. Hogan.....	202, 653	Apr. 23, 1878	870	252	13	734
Cocks and faucets, Check-valve for bib.....	O. Collier.....	199, 694	Jan. 29, 1878	1039	303	13	194
Cockle-separator.....	G. F. Newell, sr., and J. Croft.....	203, 488	May 7, 1878	265	76	13	857
Cocosnut, Desiccating.....	S. T. Chase.....	202, 521	Apr. 16, 1878	702	.....	13	706
Cocosnut fiber for manufacture of various useful products, Treatment of.....	E. Pallu.....	202, 662	Apr. 23, 1878	887	.....	13	735
Coffee and peanut roaster.....	W. F. Cranston.....	205, 787	July 9, 1878	365	105	14	58
Coffee and spice mill.....	A. Shepard.....	200, 141	July 10, 1878	753	217	14	112
Coffee and spice mill.....	T. Strobridge.....	200, 777	Feb. 20, 1878	927	272	13	398
Coffee and tea pots, Clearer for.....	W. W. Hinkle.....	208, 391	Sept. 24, 1878	863	257	14	473
Coffee, &c., Apparatus for cleaning and polishing.....	M. Doyle.....	200, 866	Aug. 13, 1878	229	73	14	230
Coffee, &c., Apparatus for making extracts of.....	B. Schmitz.....	204, 069	May 21, 1878	534	267	13	058
Coffee cleaning and polishing machine.....	H. Bamberger.....	207, 383	Aug. 27, 1878	777	231	14	316
Coffee, cocoa, &c., Drier for.....	S. Beaven.....	209, 794	Nov. 12, 1878	289	86	14	723
Coffee, Compound for coating roasted.....	J. T. Cooke.....	203, 356	June 25, 1878	1007	.....	13	1157
Coffee-hulling apparatus.....	J. A. Mosquera.....	210, 265	Nov. 26, 1878	811	{ 240 241 238 239 }	14	800
Coffee hulling, scouring, and cleaning machine.....	P. McAuliffe.....	208, 324	Sept. 24, 1878	816	.....	14	465
Coffee-mill.....	J. C. Dell.....	210, 676	Dec. 10, 1878	322	88	14	874
Coffee-mill.....	A. Shepard.....	203, 204	Apr. 30, 1878	1456	420	13	812
Coffee-mill.....	R. L. Webb.....	204, 865	June 11, 1878	467	135	13	1677

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Coffee or nut roaster	W. E. Veron	205,589	July 2, 1878	130	39	14	26
Coffee-percolator	J. C. Jensen	199,445	Jan. 22, 1878	753	221	13	141
Coffee-polishing machine	H. O. Bloom	200,817	Mar. 5, 1878	4	1	13	415
Coffee-pot	J. A. Antunes	210,483	Dec. 3, 1878	94	24	14	836
Coffee-pot	J. M. Davis	207,952	Sept. 10, 1878	395	119	14	402
Coffee-pot	G. W. Goodwyn	203,137	Apr. 30, 1878	1381	402	13	803
Coffee-pot	C. Halstead	203,208	May 7, 1878	34	10	13	825
Coffee-pot	F. H. Hunt	203,275	May 7, 1878	40	12	13	826
Coffee-pot	C. C. Kribs	200,205	Feb. 12, 1878	321	96	13	291
Coffee-pot	O. W. Noble	208,032	Sept. 17, 1878	496	148	14	429
Coffee-pot	H. Nutrizio	207,768	Sept. 3, 1878	187	57	14	373
Coffee-pot	A. B. Place	204,995	June 18, 1878	619	181	13	1101
Coffee-pot	J. C. Weller	201,139	Mar. 12, 1878	325	99	13	470
Coffee-pot and strainer	H. C. Rice	204,683	June 11, 1878	267	83	13	1953
Coffee, Preserving green	J. S. Stowman	201,848	Mar. 26, 1878	1075		13	589
Coffee-roaster	G. H. Downie	200,520	Feb. 19, 1878	644	190	13	348
Coffee-roaster	W. T. Gilliland	201,920	Apr. 2, 1878	62	16	13	607
Coffee-roaster	J. Miller	204,067	May 21, 1878	898	257	13	953
Coffee-roaster	J. B. Underwood	204,635	June 4, 1878	211	67, 68	13	1042
Coffee-roaster	J. B. and W. H. Wiggeman	206,911	Aug. 13, 1878	280	85	14	244
Coffee-roasting apparatus	A. McDonald	208,025	Sept. 17, 1878	488	145	14	419
Coffee-roasting device	J. Stevens and E. Moore	209,991	Nov. 19, 1878	504	153	14	756
Coffee-separator	H. B. Stevens	210,817	Dec. 10, 1878	460	131	14	825
Coffee, tea, &c., Apparatus for making	J. Miller	203,178	Apr. 30, 1878	1428	417	13	809
Coffin	T. E. Daniels and A. Reed	201,872	Apr. 2, 1878	15	4	13	600
Coffin	H. F. Quint	210,210	Nov. 26, 1878	755	224	14	793
Coffin and burial-casket	J. Richey	202,470	Apr. 16, 1878	654	191	13	700
Coffin-fastener	J. McCarthy	201,188	Mar. 12, 1878	369	115	13	478
Coffin-fastening	A. T. Large	204,904	June 18, 1878	528	154	13	1029
Coffin-handle	P. A. Mowers	202,367	Apr. 16, 1878	554	162	13	685
Coffin-head-rest	W. W. Ball	210,395	Dec. 3, 1878	6	1	14	825
Coffin-shield	A. H. Mooers	201,936	Apr. 2, 1878	75	21	13	610
Coffins, &c., Fastener for	A. B. Davis	201,163	Mar. 12, 1878	346	107	13	474
Coffins into graves, Apparatus for lowering	J. W. McCaslin	202,369	Apr. 16, 1878	547	160	13	684
Coffins, Mold for artificial-marble	T. E. Daniels	205,731	July 9, 1878	304	89	14	51
Coffins, Mold for artificial-stone	T. E. Daniels	205,732	July 9, 1878	305	89	14	51
Coil-spring machine	P. Cucherat	206,300	July 23, 1878	951	269 } 270 }	14	142
Coin and making change, Device for holding	G. S. Ball	202,567	Apr. 16, 1878	685	201	13	794
Coin, Apparatus for holding and counting	J. W. Meaker	201,264	Mar. 12, 1878	452	139	13	494
Coin-counter	M. McComb	210,346	Nov. 26, 1878	903	264	14	812
Coin detector and coin-receiver, Counterfeit	S. A. Field	203,719	May 14, 1878	519	147	13	858
Coin detector, Counterfeit	E. Street	209,145	Oct. 22, 1878	780	227	14	609
Coin, Device for detecting counterfeit	A. J. Baker and J. W. Simonton	202,691	Apr. 23, 1878	918	262	13	739
Coin, Device for holding and counting	F. H. Holmes	202,545	Apr. 16, 1878	746	215	13	710
Coin, Device for holding and counting	J. Oestergard	202,188	Apr. 9, 1878	355	104	13	633
Coin, Device for receiving and delivering coin and detecting counterfeit	J. W. Meaker	200,080	Feb. 5, 1878	193	61	13	283
Coin-holder	C. H. Carpenter	208,958	Oct. 15, 1878	557	163	14	574
Coin-holder	W. H. Craig	208,573	Oct. 1, 1878	121	35	14	565
Coin-holder	O. S. Harmon	209,887	Nov. 12, 1878	383	114	14	736
Coin-holder	O. S. Harmon	209,888	Nov. 12, 1878	384	114	14	736
Coin-holder	D. G. Hitchcock	206,110	July 16, 1878	717	206	14	168
Coin-holder	W. B. Leach	205,967	July 16, 1878	570	163	14	99
Coin-holder	B. McGovern	208,984	Oct. 15, 1878	581	169	14	578
Coin-holder	H. G. Pearson	207,300	Aug. 20, 1878	679	202	14	299
Coin-holder	G. N. Raymond and G. B. Perkins	209,585	Nov. 5, 1878	40	14	14	687
Coin-holder	J. W. Whittie	209,637	Nov. 5, 1878	112	33	14	696
Coin holding and delivering device	C. H. Bliss	205,343	June 25, 1878	995	295	13	1155
Coin-measure	C. H. Fuller	208,902	Oct. 15, 1878	493	142	14	566
Coin-package	C. F. Trout	202,893	Apr. 23, 1878	1131	325	13	766
Coin-tester	E. Luaders	205,492	July 2, 1878	29	9	14	12
Coin-trays, Cover for	J. F. Miller	210,621	Dec. 10, 1878	262	71	14	867
Coin-wrapper	W. L. Unger	205,773	July 9, 1878	349	100	14	56
Coin-wrappers, Device for closing the end-flaps of	G. Rettig	209,985	Nov. 19, 1878	499	151	14	735
Collar	H. O. Conaway	205,528	July 2, 1878	68	20	14	17
Collar	R. Greenidge	206,437	July 30, 1878	1128	323	14	167
Collar	M. Hermann	207,034	Aug. 13, 1878	393	121	14	239
Collar	W. M. House	200,535	Feb. 19, 1878	662	195	13	351
Collar and cuff	R. H. Sanborn, C. O. Kanouse, and A. A. Sanborn	200,939	Mar. 5, 1878	117	39	13	433
Collar and cuff blanks, Machine for folding	G. Boxley	199,615	Jan. 29, 1878	956	278 } 279 }	13	181
Collar and hame combined	J. R. Gorby	200,710	Feb. 26, 1878	865	254	13	389
Collar and hame, Horse	W. B. Guernsey	208,308	Sept. 24, 1878	801	233 } 234 }	14	462
Collar clamp, Horse	J. P. Schmitz and H. W. Cooper	206,043	July 16, 1878	645	187	14	99
Collar coupling, Horse	S. J. Bowers	210,237	Nov. 26, 1878	784	232	14	796
Collar, Dog	M. Von Culin	205,515	July 2, 1878	54	16	14	16
Collar fastening, Horse	J. H. Emerson	199,276	Jan. 15, 1878	579	169	13	196
Collar fastening, Horse	E. S. Laflerty	205,654	July 2, 1878	200	60	14	94
Collar fastening, Horse	J. Martin	203,354	May 7, 1878	122	36	13	837
Collar fastening, Horse	C. W. Patt	200,339	Feb. 12, 1878	460	136	13	311
Collar, Horse	W. H. Briggs	206,219	July 23, 1878	860	246	14	189
Collar, Horse	W. H. Brownson	206,535	July 30, 1878	1230	354	14	189
Collar, Horse	J. J. Crowley	209,025	Oct. 15, 1878	629	182	14	584
Collar, Horse	G. A. De Zeng	208,516	Oct. 1, 1878	61	19	14	497
Collar, Horse	W. H. Getzendanner and J. P. Marquardt, jr.	204,664	June 11, 1878	249	77	13	1051
Collar, Horse	J. B. Ingalls and R. Clark	202,348	Apr. 16, 1878	536	157	13	683
Collar, Horse	A. D. Martin	208,107	Sept. 17, 1878	567	170	14	439
Collar, Horse	H. L. Mennerich	207,194	Aug. 20, 1878	571	171	14	284
Collar, Horse	S. M. Palmer	205,294	June 25, 1878	937	278	13	1148
Collar, Horse	M. F. Sauer	203,650	May 14, 1878	446	127	13	889
Collar, Horse	P. J. Schmitz	200,847	Mar. 5, 1878	35	12	13	420

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Collar, Horse.....	C. H. Stevens.....	210, 219	Nov. 26, 1878	765	227	14	794
Collar, Horse.....	S. Taylor.....	202, 604	Apr. 16, 1878	866	233	13	716
Collar, Horse.....	M. Turley.....	202, 895	Apr. 23, 1878	1134	326	13	766
Collar, Metallic horse.....	J. C. Smith.....	203, 950	May 21, 1878	777	222	13	928
Collars and breeching, Bearer for harness.....	J. N. Coffin.....	200, 174	Feb. 12, 1878	293	87	13	286
Collars, Apparatus for forming horse.....	L. Long.....	209, 819	Nov. 12, 1878	312	93	14	726
Color, Methyl-aniline violet.....	H. Caro.....	204, 797	June 11, 1878	393	.....	13	1068
Colors for patterns, Sampling.....	A. Zerban.....	206, 064	July 16, 1878	608	193	14	102
Colors from copperas, Manufacture of red.....	W. Peterson.....	203, 936	May 21, 1878	758	.....	13	936
Coloring-matter to be used as dyes.....	H. Baum.....	210, 233	Nov. 26, 1878	781	.....	14	796
Colter.....	S. Hathaway.....	207, 352	Aug. 27, 1878	748	223	14	313
Colter.....	C. E. Steller.....	203, 668	May 14, 1878	465	133	13	891
Colter, Rolling.....	A. H. Burlingame.....	207, 589	Sept. 3, 1878	5	2	14	349
Colter, Rolling.....	E. A. Sanders.....	199, 937	Feb. 5, 1878	50	16	13	240
Column, Fire-proof.....	P. B. Wight.....	199, 887	Jan. 29, 1878	1216	357	13	221
Column, Fire-proof.....	P. B. Wight.....	203, 972	May 21, 1878	798	229	13	940
Column, Fire-proof.....	P. B. Wight.....	204, 867	June 11, 1878	409	136	13	1077
Comb: See Barber's-comb.      Doffer-comb. Curry-comb.							
Comb.....	M. Butron.....	205, 349	June 25, 1878	1000	296	13	1156
Combs from celluloid, &c., Manufacture of.....	J. W. Hyatt.....	199, 909	Feb. 5, 1878	22	7	13	236
Combs, Instrument for cleaning.....	C. S. Westcott.....	210, 978	Dec. 17, 1878	670	185	14	926
Combs, Machine for rounding off the ends of.....	W. Booth.....	207, 845	Sept. 10, 1878	278	86	14	387
Combing machine.....	T. H. Rushton and J. Macqueen..	208, 991	Oct. 15, 1878	586	171	14	578
Combination lock.....	P. Shellenback.....	201, 955	Apr. 2, 1878	90	26	13	612
Combination locks, Attachment to.....	R. Beachman.....	200, 599	Feb. 26, 1878	744	218	13	371
Commode.....	A. Mallory.....	204, 593	July 30, 1878	1293	372	14	188
Commode.....	S. Whitnum.....	198, 865	Jan. 1, 1878	145	41	13	31
Commode chair.....	J. Dawson.....	200, 181	Feb. 12, 1878	209	89	13	287
Commode covers, Shield for.....	H. Gerould.....	199, 284	Jan. 15, 1878	586	171	13	107
Compass.....	T. H. Grigg.....	205, 543	July 2, 1878	83	23	14	19
Compass, Mariner's.....	W. Thomson.....	210, 069	Nov. 19, 1878	584	175	14	766
Compass, Mariner's.....	W. Thomson.....	210, 069	Nov. 19, 1878	590	176	14	767
Compasses.....	A. P. Freshman.....	200, 048	Feb. 5, 1878	159	51	13	258
Compasses, Blackboard.....	C. W. Blake.....	207, 101	Aug. 20, 1878	479	144	14	273
Compound engine.....	M. B. Harvey.....	206, 235	July 23, 1878	875	250	14	132
Compound engine.....	W. H. Hoffman.....	202, 821	Apr. 23, 1878	1050	303	13	757
Condenser.....	T. R. Crooks.....	208, 717	Oct. 8, 1878	279	79	14	534
Condenser.....	R. W. Hamilton.....	203, 337	May 7, 1878	105	30	14	834
Condenser, Injection.....	W. H. Guild.....	198, 883	Jan. 1, 1878	166	47	13	34
Condenser, Mercury.....	C. E. Livermore.....	200, 069	Feb. 5, 1878	178	57	13	261
Condenser, Siphon.....	G. H. Starbuck.....	207, 827	Sept. 10, 1878	257	80	14	385
Condenser, Steam-engine.....	J. H. Gable.....	205, 793	July 9, 1878	373	107	14	59
Condensing and gas and air compressing apparatus, Steam.	E. Bärigin.....	199, 786	Jan. 29, 1878	1124	330	13	207
Condensing-vessel.....	E. D. Bangs.....	203, 873	May 21, 1878	689	196	13	927
Contrate-wheels, Manufacture of.....	H. J. and W. D. Davies.....	209, 064	Nov. 5, 1878	141	41	14	700
Convertible chair.....	C. Burnitz.....	202, 327	Apr. 16, 1878	515	151	13	680
Convertible chair.....	H. C. Hayman.....	202, 170	Apr. 9, 1878	338	99	13	651
Convertible chair.....	C. J. Higgins.....	206, 450	July 30, 1878	1142	327	14	169
Convertible chair.....	M. V. Linger.....	204, 346	May 28, 1878	1212	346	13	997
Convertible chair.....	J. H. Martin.....	201, 030	Apr. 2, 1878	69	19	13	609
Convertible chair, Child's.....	G. M. Palten.....	207, 621	Sept. 3, 1878	36	12	14	354
Cooker and steam-generator, Feed.....	M. B. Oliver.....	210, 350	Nov. 26, 1878	910	266	14	813
Cooker and steam-washer, Feed.....	J. K. Purinton.....	209, 134	Oct. 22, 1878	770	223	14	608
Cooker, Feed.....	A. G. Cunningham, J. Winhofer, and R. M. Rice.	200, 515	Feb. 19, 1878	639	188	13	347
Cooker, Feed.....	C. Gorton.....	205, 262	June 25, 1878	901	267	13	1143
Cooker, Feed.....	J. A. Pierson.....	205, 411	June 25, 1878	1060	314	13	1104
Cooker, Feed.....	A. Stewart.....	199, 593	Jan. 22, 1878	999	266	13	106
Cooker, Feed.....	O. L. Startevant.....	206, 138	July 16, 1878	750	216	14	112
Cooker, Feed.....	W. H. Whittier.....	199, 768	Jan. 29, 1878	1105	324	13	204
Cooker, Food.....	I. E. Bendickson.....	208, 560	Oct. 1, 1878	104	31	14	503
Cooker, Steam.....	C. Corning.....	203, 245	May 7, 1878	9	4	13	822
Cooker, Steam.....	R. N. Foote.....	207, 410	Aug. 27, 1878	806	239	14	320
Cooker, Steam.....	C. W. Sterick.....	208, 434	Sept. 24, 1878	931	273	14	479
Cooker, Steam feed.....	W. M. Combes.....	209, 659	Nov. 5, 1878	137	40	14	699
Cooker, Steam feed.....	J. M. Hill.....	205, 863	July 9, 1878	444	126	14	69
Cooker, Steam feed.....	L. Wroth.....	200, 237	Feb. 12, 1878	351	104	13	296
Cooking apparatus.....	J. F. Roberts.....	210, 879	Dec. 17, 1878	549	154	14	912
Cooking apparatus.....	G. J. Ward, jr.....	201, 725	Mar. 26, 1878	950	291	13	571
Cooking apparatus, Feed.....	A. Knox.....	210, 614	Dec. 10, 1878	257	70	14	866
Cooking apparatus, Feed.....	G. A. Ward.....	204, 467	June 4, 1878	50	16	13	1019
Cooking apparatus, Portable.....	C. Nikiforoff.....	206, 349	July 23, 1878	1016	290	14	149
Cooking apparatus, Portable.....	C. H. Tanner.....	199, 757	Jan. 29, 1878	1093	321	13	202
Cooking apparatus, Steam.....	L. H. Ayer.....	207, 838	Sept. 10, 1878	271	84	14	386
Cooking apparatus, Steam.....	M. Curtin.....	209, 464	Oct. 29, 1878	1110	323	14	659
Cooking apparatus, Vapor-escape attachment for.....	S. W. Poland.....	201, 943	Apr. 2, 1878	81	23	13	611
Cooking utensil.....	G. H. Henkel.....	203, 541	May 14, 1878	340	97	13	875
Cooking utensil.....	C. G. Shepard and P. Adams, jr..	200, 575	Feb. 19, 1878	702	206	13	357
Cooking utensil.....	P. J. Toomey.....	208, 865	Oct. 8, 1878	444	129	14	555
Cooler: See Beer-cooler.      Milk-cooler. Car-journal cooler.      Oyster-cooler. Corpse-cooler.      Water-cooler. Liquid-cooler.							
Cooler for water and bottled beverages.....	L. Dolle.....	209, 669	Nov. 5, 1878	146	43	14	700
Cooling and freezing apparatus.....	J. Ring.....	205, 419	June 25, 1878	1069	316	13	1165
Cooling and freezing apparatus.....	J. Ring.....	206, 135	July 16, 1878	748	215	14	112
Coop, Chicken.....	G. H. Bronson.....	205, 009	July 2, 1878	150	45	14	28
Cop-tube.....	J. Essex.....	201, 763	Mar. 26, 1878	990	302	13	576

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Copper and tinned-copper sheets, Manufacture of . . . . .	A. O'Neill . . . . .	200,801	Feb. 26, 1878	949	.....	13	462
Copy-book . . . . .	D. H. Lucken . . . . .	205,195	June 25, 1878	835	248	13	1135
Copy-holder . . . . .	J. W. McGarrett . . . . .	203,060	Apr. 30, 1878	1302	378	13	792
Copy-holder . . . . .	J. D. Moore . . . . .	200,560	Feb. 19, 1878	687	202	13	354
Copy-holder . . . . .	H. A. Peabody . . . . .	200,918	Nov. 12, 1878	413	124	14	740
Copying-press . . . . .	W. L. Cousland . . . . .	200,131	Feb. 12, 1878	248	75	13	280
Copying-press . . . . .	J. Hill . . . . .	205,862	July 9, 1878	443	126	14	69
Copying-press . . . . .	E. H. T. C. Rath . . . . .	202,756	Apr. 23, 1878	984	283	13	747
Cord . . . . .	C. Feickert . . . . .	202,011	Apr. 2, 1878	148	43	13	630
Cord-covering machine . . . . .	F. W. Huppelsberg . . . . .	200,302	Feb. 12, 1878	418	125	13	306
Cord, Double-winged plaited . . . . .	F. W. Huppelsberg . . . . .	200,303	Feb. 12, 1878	419	125	13	306
Cord, Machine for polishing and finishing . . . . .	W. Buckton . . . . .	200,503	Feb. 19, 1878	629	185	13	346
Cordage-exhibitor . . . . .	H. E. Richards . . . . .	203,854	May 21, 1878	672	190	13	924
Cordage-making machine . . . . .	G. L. Brownell . . . . .	202,406	Apr. 16, 1878	591	174	13	680
Core mold, Sand . . . . .	S. J. Adams . . . . .	210,392	Dec. 3, 1878	1	1	14	825
Cores, Machine for making . . . . .	G. Cowing . . . . .	209,551	Nov. 5, 1878	14	5	14	683
Cork-cutting machine . . . . .	A. Fabre . . . . .	199,047	Jan. 8, 1878	334	98	13	68
Cork-cutting machine . . . . .	J. Pilaso . . . . .	207,772	Sept. 3, 1878	191	59	14	373
Cork-cutting machine . . . . .	J. C. Tennent . . . . .	207,830	Sept. 10, 1878	260	81, 82	14	385
Cork-extractor . . . . .	J. H. Richardson and W. J. Taylor . . . . .	206,134	July 16, 1878	747	215	14	111
Cork-extractor . . . . .	W. W. Tucker . . . . .	207,631	Sept. 3, 1878	47	15	14	355
Cork-extractor . . . . .	P. Tyrer . . . . .	199,760	Jan. 29, 1878	1095	321	13	263
Corkscrew . . . . .	A. W. Sperry . . . . .	204,389	May 28, 1878	1256	358	13	1002
Corn and grain cleaner . . . . .	S. E. Worrell . . . . .	204,935	June 18, 1878	561	163	13	1093
Corn and potato coverer . . . . .	W. and C. T. Herbert . . . . .	200,295	Feb. 12, 1878	413	123	13	304
Corn-cob splitter . . . . .	J. F. Smith . . . . .	205,693	July 2, 1878	248	74	14	40
Corn-crib door . . . . .	A. C. Holmes . . . . .	204,733	June 11, 1878	322	98	13	1061
Corn-crib ventilator . . . . .	R. W. Hazen . . . . .	203,036	Apr. 30, 1878	1283	371	13	720
Corn-crib ventilator . . . . .	W. L. Wright . . . . .	202,086	Apr. 2, 1878	226	66	13	631
Corn cutter, Green . . . . .	J. T. Polk and O. H. Castle . . . . .	203,642	May 14, 1878	436	124	13	887
Corn-cutting implement . . . . .	L. Bickle . . . . .	203,315	May 7, 1878	87	25	13	832
Corn-drill . . . . .	J. P. Fulgham . . . . .	199,820	Jan. 29, 1878	1157	340	13	212
Corn-dropper . . . . .	H. H. Hartsock . . . . .	205,264	June 25, 1878	903	267	13	1144
Corn, &c., Drying, curing, and renovating Indian . . . . .	F. A. Luckenbach and A. De Bevoise . . . . .	205,660	July 2, 1878	206	62	14	35
Corn elevator feeder, Ear . . . . .	R. Marguis . . . . .	201,543	Mar. 19, 1878	755	230	13	538
Corn from the cob, Machine for cutting green . . . . .	T. Powell . . . . .	208,423	Sept. 24, 1878	919	269	14	478
Corn-husker, Field . . . . .	G. Meader . . . . .	199,376	Jan. 22, 1878	688	202	13	131
Corn-husking implement . . . . .	M. C. Pearse . . . . .	208,843	Oct. 8, 1878	423	123	14	553
Corn-husking implement . . . . .	J. W. Preston . . . . .	206,609	July 30, 1878	1310	377	14	190
Corn-husking implement . . . . .	E. F. Rate . . . . .	204,451	June 4, 1878	35	11	13	1017
Corn, Implement for holding hot . . . . .	J. De Yongh . . . . .	201,230	Mar. 12, 1878	414	127	13	484
Corn knife, Green . . . . .	W. Sprague . . . . .	206,364	July 23, 1878	1032	296	14	151
Corn-popper . . . . .	J. Forsyth . . . . .	205,072	June 18, 1878	695	205	13	1111
Corn-popper . . . . .	F. E. Stockwell and J. Minninghoff . . . . .	201,959	Apr. 2, 1878	94	27	13	613
Corn-popper . . . . .	I. Yost . . . . .	199,770	Jan. 29, 1878	1107	325	13	205
Corn-sheller . . . . .	J. Q. and O. R. Adams . . . . .	210,074	Nov. 19, 1878	596	178	14	768
Corn-sheller . . . . .	T. Brennan . . . . .	204,653	June 11, 1878	236	74	13	1049
Corn-sheller . . . . .	C. C. Burroughs . . . . .	201,743	Mar. 26, 1878	908	296	13	574
Corn-sheller . . . . .	C. C. Burroughs . . . . .	207,163	Aug. 20, 1878	536	161	14	280
Corn-sheller . . . . .	J. W. Fingar . . . . .	198,878	Jan. 1, 1878	162	46	13	34
Corn-sheller . . . . .	W. H. Hall . . . . .	203,032	Apr. 30, 1878	1280	370	13	789
Corn-sheller . . . . .	J. W. Miller . . . . .	204,161	May 28, 1878	1021	{ 290 } { 291 }	{ 13 } { 13 }	{ 972 } { 972 }
Corn-sheller . . . . .	H. Paeker . . . . .	206,258	July 23, 1878	903	257	14	135
Corn-sheller . . . . .	C. D. Read . . . . .	199,744	Jan. 29, 1878	1081	317	13	201
Corn-sheller . . . . .	{ H. C. Schamweber and E. Barkham . . . . . } { E. Herriott and G. S. Smith . . . . . }	{ 201,359 } { 210,633 }	{ Mar. 19, 1878 } { Nov. 19, 1878 }	{ 571 } { 552 }	{ 175 } { 165 }	{ 13 } { 14 }	{ 512 } { 762 }
Corn-sheller separator . . . . .	H. H. Eby . . . . .	204,012	May 21, 1878	844	241	13	946
Corn-shellers, Cob-elevator for . . . . .	J. G. Morris . . . . .	200,215	Feb. 12, 1878	328	99	13	292
Corn-shelling and grinding machine . . . . .	W. M. Blair . . . . .	199,496	Jan. 22, 1878	803	236	13	150
Corn-shelling machine . . . . .	M. Clark and C. A. Heckel . . . . .	199,691	Jan. 29, 1878	1036	302	13	193
Cornstalk-cutter . . . . .	J. Forlow . . . . .	202,531	Apr. 16, 1878	729	211	13	708
Cornstalks, Machine for cutting up . . . . .	C. G. Conn and E. Dupont . . . . .	199,516	Jan. 29, 1878	827	242	12	153
Cornet . . . . .	G. K. Glenn and H. Fern . . . . .	200,653	Feb. 26, 1878	802	236	13	380
Cornice-mold and mitering device . . . . .	C. Lippe . . . . .	209,346	Oct. 29, 1878	990	288	14	641
Cornice, Window . . . . .	J. Peterman . . . . .	206,607	July 30, 1878	1309	376	14	189
Cornices, Mold for running plaster . . . . .	J. Y. Brickey . . . . .	201,493	Mar. 19, 1878	762	214	13	531
Corpse-cooler . . . . .	J. Flaherty . . . . .	203,024	Apr. 30, 1878	1274	368	13	788
Corpse-cooler . . . . .	G. C. Hill . . . . .	201,525	Mar. 19, 1878	735	224	13	536
Corpse-cooler . . . . .	A. Kinnaird . . . . .	205,102	June 18, 1878	722	215	13	1115
Corpse-preserver . . . . .	W. Miller and J. Schneider . . . . .	204,237	May 28, 1878	1103	311	13	983
Corset . . . . .	M. Adler . . . . .	201,145	Mar. 12, 1878	331	101	12	472
Corset . . . . .	M. Adler . . . . .	201,978	Apr. 2, 1878	115	34	12	616
Corset . . . . .	E. W. Bigelow . . . . .	209,643	Nov. 5, 1878	117	34, 35	14	697
Corset . . . . .	I. W. Birdseye . . . . .	201,490	Mar. 19, 1878	700	213	13	531
Corset . . . . .	M. D. Birge and G. C. Skidmore . . . . .	208,456	Oct. 1, 1878	2	1	14	480
Corset . . . . .	C. A. Blohm . . . . .	200,500	Feb. 19, 1878	626	184	13	345
Corset . . . . .	L. S. Bortree . . . . .	200,967	Mar. 5, 1878	145	47	13	438
Corset . . . . .	J. Bowers . . . . .	208,362	Sept. 24, 1878	856	249	14	475
Corset . . . . .	M. P. Bray . . . . .	208,066	Sept. 17, 1878	527	158	14	425
Corset . . . . .	E. K. Bullock . . . . .	199,027	Jan. 8, 1878	316	93	13	65
Corset . . . . .	D. H. Fanning . . . . .	208,517	Oct. 1, 1878	62	19	14	497
Corset . . . . .	C. W. Foster . . . . .	198,881	Jan. 1, 1878	164	46	13	34
Corset . . . . .	L. H. Foy . . . . .	200,384	Feb. 19, 1878	515	152	13	328
Corset . . . . .	S. Gutman . . . . .	210,025	Nov. 19, 1878	544	163	14	761
Corset . . . . .	W. S. and C. F. Hunt . . . . .	210,038	Nov. 19, 1878	557	167	14	762
Corset . . . . .	H. T. Marsh . . . . .	202,038	Apr. 2, 1878	180	52	13	624
Corset . . . . .	C. L. Olmstead . . . . .	206,964	Aug. 13, 1878	327	100	14	250
Corset . . . . .	J. Ottenheimer . . . . .	202,044	Apr. 2, 1878	185	54	13	625
Corset . . . . .	J. K. Ross . . . . .	206,900	Aug. 13, 1878	270	82	14	243
Corset . . . . .	L. T. Smith . . . . .	199,587	Jan. 22, 1878	902	264	13	163



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Corset.....	M. G. Smith.....	206,693	Aug. 6, 1878	38	11	14	211
Corset.....	H. S. Strauss.....	206,906	Aug. 13, 1878	275	83	14	244
Corset.....	H. S. Strauss.....	208,049	Sept. 17, 1878	513	153	14	422
Corset.....	J. C. Tallman.....	204,459	June 4, 1878	43	14	13	1018
Corset-busk.....	J. D. Banfield.....	203,400	May 7, 1878	171	49	13	844
Corset-clasp.....	T. C. Candlish.....	200,693	Feb. 26, 1878	844	248	13	3-6
Corset-clasp.....	L. M. Chipley.....	207,253	Aug. 29, 1878	633	189	14	292
Corset-clasp.....	J. S. Crotty.....	209,112	Oct. 22, 1878	742	215	14	604
Corset-clasp.....	D. H. Fanning.....	199,277	Jan. 15, 1878	580	169	13	106
Corset-clasp.....	E. J. Love.....	208,618	Oct. 1, 1878	161	47	14	511
Corset-clasp.....	L. F. McNett.....	199,921	Feb. 5, 1878	35	11	13	228
Corset-clasp.....	J. M. Van Orden.....	201,307	Mar. 12, 1878	499	154	13	495
Corset-exhibitor.....	S. B. Ferris.....	207,351	Aug. 27, 1878	747	223	14	313
Corset-fastening.....	F. B. Brown.....	203,113	Apr. 30, 1878	1354	394	13	799
Corset, Galvanic.....	S. W. Geery.....	210,932	Dec. 17, 1878	619	172	14	921
Corset, Skirt-supporting.....	J. H. Foy.....	205,479	July 2, 1878	16	5	14	11
Corset-spring.....	J. Day.....	199,417	Jan. 22, 1878	730	215	13	138
Corset-springs, Machine for tipping.....	T. B. De Forest.....	203,428	May 7, 1878	201	58	13	848
Corset-stays, &c., Treatment of wood for.....	J. G. La Foutte.....	201,022	Mar. 5, 1878	200	.....	13	446
Corset-steel.....	C. Jordan.....	198,984	Jan. 8, 1878	274	79	13	58
Corsets, Manufacture of.....	A. Fellheimer.....	201,764	Mar. 26, 1878	991	302	13	577
Corsets, Manufacture of.....	A. Fellheimer.....	208,162	Sept. 17, 1878	632	186	14	438
Corsets, Manufacture of.....	J. C. Tallman.....	200,583	Feb. 19, 1878	710	209	13	358
Cotton and hay press.....	G. Ertel.....	199,360	Jan. 22, 1878	675	198	13	129
Cotton and hay press.....	S. T. McCannless.....	204,442	June 4, 1878	28	9	13	1016
Cotton and hay press.....	D. R. Smith.....	209,429	Oct. 29, 1878	1074	311	14	653
Cotton and hay press.....	G. W. Soule.....	201,465	Mar. 19, 1878	674	206	13	527
Cotton and hay press.....	W. H. Tappey and A. Steel.....	209,087	Oct. 15, 1878	699	202	14	593
Cotton-can bottom.....	J. Hill.....	204,971	June 18, 1878	595	174	13	1098
Cotton-chopper.....	F. E. Glover.....	201,240	Mar. 12, 1878	428	131	13	485
Cotton chopper and cultivator combined.....	W. Mullens.....	206,347	July 23, 1878	1014	290	14	149
Cotton chopper and rake.....	C. A. Sprague and J. W. Clardy.....	210,574	Dec. 3, 1878	205	54	14	850
Cotton-cleaner.....	R. Desha and W. A. Manahan.....	198,873	Jan. 1, 1878	153	44	13	32
Cotton-cleaner.....	W. Herrmann.....	200,721	Feb. 26, 1878	874	257	13	390
Cotton cleaner and condenser.....	A. T. Hunt.....	201,676	Mar. 26, 1878	902	275	13	563
Cotton cleaner, Seed.....	J. W. Clarke.....	202,931	Apr. 30, 1878	1182	341	13	776
Cotton-cleaning machine.....	R. H. Shotwell.....	207,777	Sept. 3, 1878	195	60	14	374
Cotton-condenser.....	T. Camp.....	208,071	Sept. 17, 1878	532	159	14	425
Cotton-condenser.....	E. Cook.....	204,951	June 18, 1878	576	168	13	1095
Cotton-condenser.....	J. T. Donovan.....	210,678	Dec. 10, 1878	324	88	14	874
Cotton-gin.....	J. B. Brackett and L. M. Merrill.....	202,326	Apr. 16, 1878	514	151	13	680
Cotton-gin.....	J. W. Burt, jr.....	202,927	Apr. 30, 1878	1178	340	13	776
Cotton-gin.....	D. T. Ethridge.....	206,097	July 16, 1878	699	202	14	106
Cotton-gin.....	J. B. Hull.....	209,049	Oct. 15, 1878	658	190	14	588
Cotton-gin.....	J. McClure.....	204,443	June 4, 1878	28	10	13	1016
Cotton-gin.....	A. L. Stietenroth.....	200,776	Feb. 26, 1878	926	272	13	398
Cotton-gin and linter feeder.....	F. Streuby.....	204,690	June 11, 1878	276	85	13	1055
Cotton-gin condenser.....	O. Washburne.....	202,611	Apr. 16, 1878	812	235	13	717
Cotton-gin feeder and cleaner combined.....	W. L. Crowson.....	202,238	Apr. 9, 1878	403 { 117 } 118	13	660	
Cotton-gin rib.....	C. S. Williams.....	206,847	Aug. 6, 1878	199	63	14	231
Cotton, grain, &c., Machine for cleaning.....	J. Fitts.....	204,805	June 11, 1878	401	117	13	1069
Cotton opener and cleaner.....	H. Ellis.....	210,930	Dec. 17, 1878	617	171	14	920
Cotton opener and cleaner.....	R. Kitson.....	201,424	Mar. 19, 1878	635	194	13	521
Cotton opener and lapper.....	W. E. Whitehead and A. T. Atherton.....	208,353	Sept. 24, 1878	845	246	14	468
Cotton-picker.....	G. Custer.....	205,058	June 18, 1878	680	199	13	1109
Cotton-press.....	E. M. Ivens and J. H. Dorand.....	200,615	Feb. 26, 1878	760	223	13	374
Cotton-press.....	E. L. Morse.....	204,240	May 28, 1878	1107	316	13	983
Cotton-press.....	S. Pope.....	203,644	May 14, 1878	439	125	13	888
Cotton-press.....	J. D. Stanley.....	207,991	Sept. 10, 1878	437	131	14	408
Cotton-press.....	W. H. Tate and J. E. Curtis.....	204,395	May 28, 1878	1261	360	13	1003
Cotton-press.....	R. C. and J. N. Thompson.....	198,907	Jan. 1, 1878	192	54	13	38
Cotton-rovng can.....	J. Hill.....	204,220	May 28, 1878	1087	310	13	981
Cotton scraper and chopper, Combined.....	R. F. Gibson and R. P. McDaniel.....	206,871	Aug. 13, 1878	233	74	14	239
Cotton, Stowing.....	D. Hayes.....	199,975	Feb. 5, 1878	83	27	13	246
Cotton-sweep.....	W. W. Speer.....	199,590	Jan. 22, 1878	905	265	13	165
Cotton, wool, &c., Toothed cylinder for working.....	F. P. Pendleton.....	210,222	Nov. 26, 1878	768	228	14	794
Cotton-worm destroyer.....	G. Yeager.....	204,410	May 28, 1878	1278	364	13	1005
Counter, and heel-protector, Combined.....	C. W. Hughes and T. E. Dyer.....	211,017	Dec. 17, 1878	714	197	14	932
Counter-guide.....	G. F. Hollis.....	210,327	Nov. 26, 1878	881	259	14	809
Counterpoise battery.....	B. Kennon.....	204,831	June 11, 1878	427	126	13	1073
Countersink.....	W. R. Gill.....	209,252	Oct. 22, 1878	881	256	14	623
Coupling:							
See Air-brake coupling, Pipe-coupling.							
See Axle-coupling, Shaft-coupling.							
See Belt-coupling, Thill-coupling.							
See Car-coupling, Trace-coupling.							
See Carriage-spring coupling, Trace and hame tug coupling.							
See Collar-coupling, Vehicle.spring coupling.							
See Fifth-coupling, Wagon-spring coupling.							
See Hose-coupling, Yoke-coupling.							
Cow-fetter.....	J. A. Wilcox.....	204,933	June 18, 1878	559	163	13	1093
Cowl:							
See Chimney-cowl.							
Cracker-machine.....	J. W. and A. Ruger.....	211,057	Dec. 17, 1878	773	212	14	938
Cradle.....	L. J. Adams.....	198,784	Jan. 1, 1878	68	17	13	18
Cradle.....	A. Bernhard.....	204,944	June 18, 1878	571	167	13	1095
Cradle.....	J. Sprengard.....	200,805	Feb. 26, 1878	933	280	13	403
Cradle.....	E. Whitehead.....	208,052	Sept. 17, 1878	516	154	14	423
Cradle and table, Combined.....	D. M. Killian and L. R. Humbert.....	206,798	Aug. 6, 1878	146	45	14	225
Cradles, Locking device for.....	H. H. Wiggers and J. F. Wesseler.....	205,776	July 9, 1878	352	101	14	57
Cranberry-gatherer.....	A. K. Gile.....	202,103	Apr. 9, 1878	262	76, 77	13	641
Cranberry-picker.....	L. and Z. Hall and W. Crowell.....	199,703	Jan. 29, 1878	1047	306	13	195



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Cranberry-picker .....	D. Lumbert .....	199, 728	Jan. 29, 1878	1068	312	13	198
Cranberry-picker .....	A. C. Nickerson .....	201, 280	Mar. 12, 1878	407	144	13	491
Cranberry-rake .....	H. Crowell .....	210, 599	Dec. 10, 1878	238	65	14	864
Cranberry-rake .....	A. K. Gile .....	203, 538	May 14, 1878	338	96	13	875
Crane .....	J. M. De Célis .....	100, 898	Mar. 5, 1878	80	28	12	427
Crane clamp, Mail .....	A. V. Lunger .....	100, 820	Nov. 12, 1878	312	93	14	726
Crane for hoisting car-wheels, &c. ....	W. M. Davis .....	209, 236	Oct. 22, 1878	868	252	14	821
Crane, Hydraulic .....	C. H. Morgan .....	207, 200	Aug. 20, 1878	576	173	14	285
Crane, Hydraulic .....	S. T. Wellman .....	208, 051	Sept. 17, 1878	515	153	14	423
Crane, Traveling .....	W. H. Elliot .....	210, 601	Dec. 10, 1878	239	65, 66	14	864
Crank, Handle .....	W. B. Coates .....	210, 669	Dec. 10, 1878	314	86	14	873
Crato .....	A. M. Smith .....	203, 205	Apr. 30, 1878	1457	426	13	812
Crayon .....	J. W. Swarts .....	201, 067	Mar. 5, 1878	246	.....	13	452
Crayon-mold-section mold .....	C. H. Bill .....	209, 134	Oct. 22, 1878	789	229	14	610
Crayons, Composition for .....	C. C. Parsons .....	201, 283	Mar. 12, 1878	473	.....	13	492
Crayons, Manufacture of colored .....	C. Walpuski .....	209, 528	Oct. 29, 1878	1180	.....	14	669
Cream-raising apparatus .....	J. W. Brady .....	204, 127	May 28, 1878	983	280	13	987
Cream-raising apparatus .....	J. W. Powers .....	210, 876	Dec. 17, 1878	545	153	14	911
Cream-raising apparatus .....	S. S. Weldon .....	210, 729	Dec. 10, 1878	375	103	14	881
Crimping-form .....	J. Ryan .....	202, 123	Apr. 9, 1878	284	83	13	644
Crochet-machine .....	S. L. Otis .....	207, 770	Sept. 3, 1878	189	58	14	373
Crocheting fabrics, Machine for .....	H. A. House .....	206, 878	Aug. 13, 1878	243	77	14	141
Crocheting-machine for making looped fabrics	C. Young .....	209, 786	Nov. 12, 1878	278	83, 84	14	722
Cross-head and other slides .....	W. Tucker .....	206, 048	July 30, 1878	1349	588	14	194
Cross-tie, Iron .....	J. A. Bonnell .....	207, 242	Aug. 20, 1878	621	146	14	191
Crucible-machine .....	J. C. Cline .....	208, 960	Oct. 15, 1878	559	163	14	575
Crucible, Metallurgic .....	W. L. Glorieux .....	199, 823	Jan. 20, 1878	1160	341	13	213
Crucibles or melting-pots, Shield for the tops of	J. Feix .....	206, 098	July 16, 1878	700	222	14	106
Crusher: .....	.....	.....	.....	.....	.....	.....	.....
See Clod-crusher. Tobacco-crusher.	.....	.....	.....	.....	.....	.....	.....
Ore-crusher .....	D. C. Newell .....	203, 304	May 7, 1878	135	39	13	838
Crushing and grinding roll .....	G. E. Sherwin .....	204, 849	June 11, 1878	448	131	13	1075
Crushing and pulverizing machine .....	G. Daverio .....	200, 263	Feb. 12, 1878	380	112	13	300
Crushing roll .....	J. Schedler .....	209, 521	Oct. 29, 1878	1173	.....	14	668
Crystallo-types, Making .....	T. Hedgco, E. Möller, and C. Graf .....	208, 817	Oct. 8, 1878	390	111	14	548
Cuff .....	C. H. Morse .....	201, 818	Mar. 26, 1878	1044	319	13	584
Cuff, Reversible .....	R. E. Deane .....	201, 165	Mar. 12, 1878	348	107	13	474
Culinary boiler .....	A. F. McConnell .....	207, 974	Sept. 10, 1878	418	126	14	465
Culinary utensil .....	J. W. Steele .....	200, 102	Feb. 5, 1878	212	66	13	286
Culinary utensil .....	J. L. Follett .....	211, 076	Dec. 17, 1878	702	217	14	941
Culinary vessel .....	O. S. Bliss .....	199, 403	Jan. 22, 1878	716	211	13	135
Culinary vessel, Steam .....	W. H. Thomas .....	199, 481	Jan. 22, 1878	789	232	13	147
Cultivating implement .....	W. T. Addison .....	210, 073	Nov. 19, 1878	595	177	14	767
Cultivator .....	S. L. Allen .....	200, 681	Feb. 26, 1878	833	245	13	384
Cultivator .....	L. A. Thome .....	199, 680	Jan. 29, 1878	1025	290	13	191
Cultivator .....	C. T. Barton .....	208, 284	Sept. 24, 1878	777	227	14	459
Cultivator .....	J. C. Bean .....	209, 005	Oct. 13, 1878	604	175	14	580
Cultivator .....	I. A. Benedict .....	199, 017	Jan. 8, 1878	307	90	13	64
Cultivator .....	F. T. Bertrand .....	205, 828	July 9, 1878	411	117	14	65
Cultivator .....	C. D. Bradley .....	206, 925	Aug. 13, 1878	292	89	14	246
Cultivator .....	A. Canfield .....	210, 993	Dec. 17, 1878	687	189	14	28
Cultivator .....	C. D. Carter .....	204, 883	June 18, 1878	506	148	13	1086
Cultivator .....	F. M. Cropp .....	208, 073	Sept. 17, 1878	534	159	14	425
Cultivator .....	B. H. Cross .....	208, 964	Oct. 15, 1878	593	164	14	575
Cultivator .....	W. H. Dickey .....	208, 570	Oct. 1, 1878	124	36	14	506
Cultivator .....	S. H. Ford .....	199, 634	Jan. 29, 1878	980	285	13	185
Cultivator .....	O. S. Gandy .....	203, 132	Apr. 30, 1878	1577	400	13	802
Cultivator .....	J. George .....	205, 630	July 2, 1878	170	51	14	31
Cultivator .....	M. G. Graham .....	199, 701	Jan. 29, 1878	1045	305	13	195
Cultivator .....	J. M. Graves .....	199, 972	Feb. 5, 1878	81	20	13	245
Cultivator .....	W. Henigst .....	207, 808	Sept. 10, 1878	238	75	14	382
Cultivator .....	J. Jennings, jr .....	209, 481	Oct. 29, 1878	1129	329	14	662
Cultivator .....	M. Johnson .....	203, 048	Apr. 30, 1878	1293	375	13	791
Cultivator .....	M. Johnson .....	209, 401	Oct. 29, 1878	1043	303	14	649
Cultivator .....	W. A. Knowlton and A. Rutledge .....	210, 801	Dec. 17, 1878	522	148	14	909
Cultivator .....	F. C. Lether .....	202, 112	Apr. 9, 1878	270	80	13	642
Cultivator .....	J. Mallon .....	206, 185	July 23, 1878	819	234	14	125
Cultivator .....	W. S. Moon .....	205, 889	July 9, 1878	472	135	14	72
Cultivator .....	C. Nash .....	208, 021	Oct. 15, 1878	514	149	14	580
Cultivator .....	R. K. Niece .....	207, 767	Sept. 3, 1878	186	57	14	372
Cultivator .....	D. R. Raymond .....	200, 089	Feb. 5, 1878	201	63	13	264
Cultivator .....	C. E. Sackett .....	206, 974	Aug. 13, 1878	334	102	14	251
Cultivator .....	J. Smith .....	207, 778	Sept. 3, 1878	197	60	14	374
Cultivator .....	M. Smith .....	210, 718	Dec. 10, 1878	363	100	14	879
Cultivator .....	S. R. Stanton .....	206, 903	Aug. 13, 1878	272	83	14	243
Cultivator .....	G. W. Staver .....	209, 780	Nov. 12, 1878	272	81	14	721
Cultivator .....	F. W. Tolley .....	210, 884	Dec. 17, 1878	555	156	14	913
Cultivator .....	E. Trumbo .....	209, 366	Oct. 29, 1878	1013	294	14	644
Cultivator .....	W. A. Van Brunt and S. E. Davis .....	209, 633	Nov. 5, 1878	107	31, 32	14	605
Cultivator .....	D. S. Wagner .....	201, 136	Mar. 12, 1878	322	99	13	470
Cultivator .....	P. J. Ward .....	200, 955	Mar. 5, 1878	130	43	13	436
Cultivator .....	T. P. S. Weems .....	202, 070	Apr. 2, 1878	218	64	13	630
Cultivator .....	D. L. Wellman .....	203, 394	May 7, 1878	167	48	13	843
Cultivator .....	J. Young .....	204, 412	May 28, 1878	1279	365	13	1005
Cultivator and corn-planter, Combined .....	J. Hamelback .....	202, 026	Apr. 2, 1878	165	48	13	623
Cultivator and corn-plow, Combined .....	T. T. Daniels .....	208, 377	Sept. 24, 1878	869	253	14	471
Cultivator and seed-drill combined .....	E. G. Matthews .....	199, 081	Jan. 8, 1878	366	108	13	74

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Cultivator and seeder.....	B. F. Morris and E. H. Austin ..	205,668	July 2, 1878	218	65	14	36
Cultivator and seeder, Gang.....	J. Sherrill ..	210,569	Dec. 3, 1878	197	52	14	849
Cultivator, Corn.....	D. Pattee ..	201,627	Mar. 26, 1878	859	262	13	557
Cultivator, Corn.....	J. Smith ..	202,763	Apr. 23, 1878	991	285	13	748
Cultivator, Corn.....	F. T. Verharen ..	203,527	Oct. 29, 1878	1178	342	14	668
Cultivator, Cotton.....	W. W. Harvey ..	208,688	Sept. 17, 1878	547	163	14	427
Cultivator-points, Machine for forming.....	J. Harper ..	200,287	Feb. 12, 1878	402	{ 119 120 }	{ 13 13 }	{ 303 303 }
Cultivator, Pulverizing ..	G. Stevenson ..	200,355	Feb. 12, 1878	477	140	13	314
Cultivator, Riding ..	W. G. Barnes ..	206,763	Aug. 6, 1878	107	34	14	220
Cultivator, Riding ..	H. H. Canada ..	209,224	Oct. 22, 1878	857	249	14	620
Cultivator, Riding corn ..	G. W. Staver ..	202,383	Apr. 16, 1878	570	107	13	687
Cultivator-sleeves, Manufacture of ..	C. P. Buckingham ..	201,324	Mar. 19, 1878	534	164	13	507
Cultivator, Sulky ..	F. W. Degen ..	207,398	Aug. 27, 1878	791	235	14	318
Cultivator, Sulky ..	S. Gesley ..	201,001	Mar. 5, 1878	180	57	13	443
Cultivator-tooth ..	H. Carson ..	203,417	May 7, 1878	189	55	13	846
Cultivator-tooth ..	W. A. Van Brunt and S. E. Davis ..	201,304	Mar. 12, 1878	495	153	13	495
Cultivator, Wheat.....	J. Stimmell ..	209,431	Oct. 23, 1878	1677	312	14	654
Cultivator, Wheel.....	D. Argerbright ..	209,210	Oct. 22, 1878	846	244	14	618
Cultivator, Wheel.....	A. Geppert ..	209,118	Oct. 22, 1878	759	218	14	605
Cultivator, Wheel.....	J. E. Mustard ..	203,961	Aug. 13, 1878	324	99	14	250
Cultivator, Wheel.....	B. F. and L. W. Needham ..	199,565	Jan. 22, 1878	877	257	13	161
Cultivator, Wheel.....	F. W. Pusey ..	206,040	July 10, 1878	642	186	14	99
Cultivator, Wheel.....	G. W. Ray ..	205,417	June 25, 1878	1067	316	13	1165
Cultivator, Wheel.....	C. Sexton ..	203,656	May 14, 1878	452	129	13	889
Cultivators, Gopher or riding attachment for ..	H. Parker ..	198,752	Jan. 1, 1878	24	6	13	12
Cup: See Elevator-cup. Tin cup. Hydrometer-cup. Umbrella-tip cup. Oil-cup.							
Cup and other vessels ..	H. Berry ..	200,686	Feb. 23, 1878	837	246	13	385
Cups and saucers, Case or box for holding ..	T. Haviland ..	210,688	Dec. 10, 1878	333	91	14	876
Cupboard, Elevating ..	J. T. Westwood ..	202,506	Apr. 23, 1878	1145	329	13	767
Cupola-furnace and process of working iron ..	D. Thomas ..	202,605	Apr. 16, 1878	807	233	13	716
Cupola-tuyere and blast-deflector ..	C. T. Clark ..	208,465	Oct. 1, 1878	13	4	14	490
Curbstone and gutter for streets, Combined ..	T. W. Phinney ..	203,130	July 16, 1878	743	213	14	111
Curd-knife ..	A. E. Smith ..	206,629	July 30, 1878	1326	381	14	192
Current and tide wheel ..	W. Alger ..	206,289	July 23, 1878	942	266	14	140
Current-wheel ..	T. J. Bottoms ..	207,488	Aug. 27, 1878	890	262	14	330
Current-wheel ..	E. H. Smith ..	203,382	May 7, 1878	153	44	13	841
Currier's knife ..	T. Hansen and G. W. Weiffenbach ..	208,593	Oct. 1, 1878	140	41	14	508
Curry-comb ..	H. Beach ..	206,526	July 30, 1878	1222	351	14	179
Curry-comb ..	M. Cole ..	202,410	Apr. 16, 1878	595	175	13	691
Curry-comb ..	J. E. Finley ..	202,161	Apr. 9, 1878	329	96	13	649
Curry-comb ..	L. A. Griswold ..	202,436	Apr. 16, 1878	623	182	13	695
Curry-comb ..	C. A. Hotchkiss ..	208,879	Oct. 8, 1878	459	132	14	557
Curry-comb ..	W. E. Lawrence and C. E. L. Holmes ..	202,837	Apr. 23, 1878	1073	307	13	758
Curry-comb ..	N. W. Mottinger ..	203,288	May 7, 1878	58	17, 18	13	828
Curry-comb ..	C. W. Pagett ..	207,673	Sept. 3, 1878	90	27	14	360
Curry-comb ..	M. Sweet ..	202,482	Apr. 16, 1878	664	195	13	701
Curtain-bracket ..	H. L. Judd ..	201,682	Mar. 26, 1878	906	277	13	564
Curtain-cord tightener ..	M. L. Cummings ..	205,301	July 23, 1878	955	271	14	142
Curtain-cord tightener ..	G. B. Katzen ..	209,125	Oct. 22, 1878	759	220	14	606
Curtain-cord tightener ..	J. F. Meinhardt ..	202,852	Apr. 23, 1878	1087	311	13	760
Curtain-cord tightener ..	F. E. Porter and D. A. Beatson ..	205,414	June 25, 1878	1065	315	13	1164
Curtain-cord tightener ..	T. Van Kannel ..	203,569	May 14, 1878	371	105	13	879
Curtain-drying frame ..	H. F. Marsh ..	211,032	Dec. 17, 1878	741	203	14	935
Curtain-fixture ..	G. W. Cornell ..	198,839	Jan. 1, 1878	117	33	13	27
Curtain-fixture ..	J. Gillmore ..	205,073	June 18, 1878	695	205	13	1111
Curtain-fixture ..	H. Herlt ..	203,270	May 7, 1878	36	11	13	825
Curtain-fixture ..	S. Hodges ..	207,520	Aug. 27, 1878	924	272	14	334
Curtain-fixture ..	C. P. Jadin ..	206,794	Aug. 6, 1878	143	74	14	224
Curtain-fixture ..	J. C. Lake ..	200,314	Feb. 12, 1878	434	129	13	308
Curtain-fixture ..	J. F. Lash ..	201,709	Mar. 26, 1878	1026	313	13	582
Curtain-fixture ..	J. K. Macfarlane ..	205,493	July 2, 1878	39	10	14	12
Curtain-fixture ..	F. C. D. McKay ..	199,729	Jan. 29, 1878	1069	313	13	198
Curtain-fixture ..	G. F. Shaw ..	201,710	Mar. 26, 1878	933	286	13	568
Curtain-fixture ..	E. G. Stanley ..	200,099	Feb. 5, 1878	239	65	13	265
Curtain-fixture ..	O. Steinhof ..	207,690	Sept. 3, 1878	106	32	14	362
Curtain-fixture ..	C. W. Stowe ..	204,858	June 11, 1878	455	133	13	1076
Curtain-fixture ..	R. White ..	203,313	Oct. 22, 1878	942	275	14	631
Curtain-roller ..	J. Nesbitt and A. Anderson ..	208,771	Nov. 12, 1878	265	79	14	729
Curtain-roller ..	C. J. Ortmann and G. Kampf ..	205,759	May 14, 1878	561	158	13	893
Curtain-roller and bracket ..	C. Buckley and L. L. Sawyer ..	203,414	May 7, 1878	186	54	13	846
Curtain-roller and bracket ..	C. Buckley and L. L. Sawyer ..	203,001	May 21, 1878	824	233	13	545
Curtain-roller and bracket ..	C. B. Clark ..	205,418	May 7, 1878	190	55	13	816
Curtain-roller and bracket ..	J. S. Henry ..	202,028	Apr. 5, 1878	167	48	13	623
Curtain-roller and bracket ..	E. T. Higham ..	207,965	Sept. 10, 1878	410	124	14	404
Curtain-roller and bracket ..	W. F. Hurrell, Jr. ..	209,394	Feb. 12, 1878	420	125	13	206
Curtain-roller and bracket ..	J. C. Lake ..	201,023	Mar. 5, 1878	201	64	13	446
Curtain-roller and bracket ..	J. P. Morris ..	201,621	Mar. 26, 1878	854	259	13	553
Curtain-roller and bracket ..	W. B. Noyes ..	208,417	Sept. 24, 1878	912	267	14	477
Curtain-roller and bracket ..	A. B. Shaw ..	202,592	Apr. 16, 1878	705	229	13	715
Curtain-roller and bracket ..	H. L. Werno ..	208,130	Sept. 17, 1878	595	177	14	424
Curtain-rollers and fixtures, Rack for ..	J. F. Almy ..	202,773	Apr. 23, 1878	1000	288	13	750
Curtain-stretcher ..	J. Conrath ..	202,411	Apr. 16, 1878	535	175	13	691
Curtain-tassel ..	L. B. and M. B. Griffith ..	201,109	Mar. 12, 1878	292	90	13	466
Cushion: See Billiard-table cushion. Sulky-cushion. Stall-cushion.							
Cuspadore ..	J. H. Ferriss ..	209,337	Oct. 22, 1878	980	285	14	639
Cuspadore ..	E. A. Heath ..	199,541	Jan. 22, 1878	857	250	13	158
Cuspadore ..	E. A. Heath ..	206,325	July 23, 1878	987	261	14	146

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Cuspadore.....	A. Ledig.....	206,585	July 30, 1878	1286	370	14	187
Cuspadore.....	S. J. Van Stavoren.....	199,333	Jan. 15, 1878	637	185	13	115
Cuspadore.....	S. J. Van Stavoren.....	206,843	Aug. 6, 1878	191	61	14	230
Cut-off.....	H. Southworth.....	209,301	Oct. 22, 1878	932	272	14	630
Cut-off.....	H. Wadsworth.....	203,224	Apr. 30, 1878	1474	431	13	814
Cut-off, Automatic water.....	V. M. Ring.....	206,616	July 30, 1878	1316	378	14	190
Cut-off, Engine.....	J. H. Dunbar.....	205,368	June 25, 1878	1020	302	13	1158
Cut-off for engines, Self-adjusting.....	W. Lowe.....	201,353	Mar. 19, 1878	566	174	13	512
Cut-off for flexible pipes.....	C. Weed.....	200,113	Feb. 5, 1878	226	69	13	267
Cut-off for plane-valve engines, Automatic.....	E. R. Dingley.....	203,009	Apr. 30, 1878	1256	364	13	785
Cut-off valve for steam-engines.....	R. Sanderson.....	206,975	Aug. 13, 1878	336	103	14	251
Cut-off valve for water-tanks, &c., Automatic.....	S. G. Anderson.....	201,979	Apr. 2, 1878	115	34	13	616
Cutlery blank.....	G. Abel and J. Pedder.....	205,329	June 25, 1878	979	290	13	1153
Cutlery, Table.....	E. Cadz.....	203,002	May 21, 1878	836	239	13	945
Cutlery, Table.....	G. L. Hart and H. Fisher.....	209,679	Nov. 5, 1878	157	46	14	702
Cutlery, Table.....	C. Reese.....	202,757	Apr. 23, 1878	985	283	13	749
Cutter:							
<i>See</i> Band-cutter.....	Lead-cutter.....						
Bread-cutter.....	Meat-cutter.....						
Butter-cutter.....	Meat and vegetable						
Button-hole cutter.....	cutter.....						
Cake-cutter.....	Peach-cutter.....						
Card-cutter.....	Peg-cutter.....						
Check-cutter.....	Plow-cutter.....						
Cheese-cutter.....	Root-cutter.....						
Cheese-cloth cutter.....	Rotary cutter.....						
Cigar-cutter.....	Saddle and pad screw						
Cigar-wrapper cutter.....	cutter.....						
Corn-cutter.....	Sod-cutter.....						
Corn-stalk cutter.....	Stalk-cutter.....						
Feed-cutter.....	Straw-cutter.....						
Fodder-cutter.....	Strawberry-vine cutter.....						
Gold-leaf cutter.....	Tobacco-cutter.....						
Harvester-cutter.....	Vegetable-cutter.....						
Hay-cutter.....	Venier-cutter.....						
Key-seat or pinion cut-	Washer-cutter.....						
ter.....	Wire-cutter.....						
Cutter-head.....	C. M. Coulter.....	200,980	Mar. 5, 1878	155	51	13	439
Cutter-head.....	J. H. and H. F. Guiley.....	210,522	Dec. 3, 1878	143	37	14	842
Cutter-head.....	O. Lindblad.....	200,316	Feb. 12, 1878	435	130	13	308
Cutter-head for frizzing-machines.....	R. Naatz.....	203,552	May 14, 1878	356	100	13	877
Cutter-head knife.....	P. C. McGrath.....	205,564	July 2, 1878	108	31	14	23
Cutter-heads, Beading attachment to.....	J. J. Nolan.....	204,597	June 4, 1878	170	55	13	1037
Cutting-board.....	F. Weed.....	204,176	May 28, 1878	1037	295	13	974
Cutting-gage.....	S. Elliott.....	207,597	Sept. 3, 1878	12	5	14	351
Cutting instrument or tool.....	J. A. Peer.....	205,296	June 25, 1878	938	279	13	1148
Cutting-tool.....	G. W. Maher.....	206,338	July 23, 1878	1004	286	14	146
Cylinder and balanced slide-valve for steam-engines,	J. M. Searle and G. G. Palmer.....	206,268	July 23, 1878	914	260	14	137
Rotary exhaust.....							
Cylinder, Burring.....	F. G. and A. C. Sargent.....	207,447	Aug. 27, 1878	847	250	14	824
Cylinder-lock.....	C. C. Coleman.....	200,511	Feb. 19, 1878	637	187	13	347
Cylinder lubricator, Steam.....	N. Seibert.....	208,931	Oct. 15, 1878	526	154	14	570
Cylinder, Triturating and reducing.....	A. Giddings.....	206,720	Aug. 6, 1878	64	21	14	215
Cylinder with steam-jacket, Steam.....	E. D. Leavitt, jr., and W. Jones.....	201,429	Mar. 19, 1878	642	196	13	523
Cylinders, Fastening heads in metal.....	P. B. Clark.....	199,794	Jan. 29, 1878	1133	332	13	202
Cylinders, Wire clothing for burring and other.....	F. P. Pendleton.....	202,370	Apr. 16, 1878	559	163	13	685
Cylindrical objects, Grinding and finishing.....	T. C. Harris.....	209,476	Oct. 29, 1878	1121	327	14	661
D.							
Dam and pier.....	R. S. Littlefield.....	208,248	Sept. 24, 1878	737	215	14	454
Dam or dike, Artificial.....	C. M. Scott.....	200,412	Feb. 19, 1878	541	160	13	332
Dam, Water.....	H. C. Herron.....	198,939	Jan. 8, 1878	229	65	13	51
Damper and regulator, Stove-pipe.....	T. C. Phelan.....	210,354	Nov. 26, 1878	913	267	14	813
Damper for bakers' ovens.....	F. Schwab.....	208,638	Oct. 1, 1878	186	53	14	514
Damper, Stove.....	E. Bussey.....	205,050	June 18, 1878	673	197	13	1108
Damper, Stove.....	J. S. Van Buren.....	205,321	June 25, 1878	968	286	13	1153
Damper, Stove.....	T. White.....	204,406	May 28, 1878	1273	363	13	1004
Damper, Stove-pipe.....	C. B. Clark.....	206,227	July 23, 1878	868	248	14	131
Damper, Stove-pipe.....	S. Crowell.....	205,177	June 25, 1878	814	242	13	1132
Damper, Stove-pipe.....	G. C. Dunklee.....	208,800	Oct. 8, 1878	373	106	14	546
Dash-boards, Tool for trimming and finishing the	B. C. Converse.....	203,591	May 14, 1878	390	110	13	883
edges of.....							
Dash-rail.....	J. F. Fowler.....	202,532	Apr. 16, 1878	730	211	13	706
Dash-rail fastener.....	J. F. Fowler.....	210,773	Dec. 10, 1878	422	117	14	857
Dasher, Apparatus for manufacture of.....	J. E. White.....	207,785	Sept. 3, 1878	204	63	14	374
Deep-water safety-bath.....	J. J. Bamber.....	208,360	Sept. 24, 1878	854	249	14	408
Dental articulator.....	H. C. F. Oehlcker.....	198,853	Jan. 1, 1878	131	37	13	19
Dental bracket.....	W. D. Ewart.....	201,876	Apr. 2, 1878	19	5	13	601
Dental chair.....	W. S. How.....	207,741	Sept. 3, 1878	160	49	14	309
Dental chair.....	E. T. Starr.....	210,366	Nov. 26, 1878	925	270	14	815
Dental chair.....	K. C. Tripp.....	208,000	Sept. 10, 1878	447	134	14	400
Dental chairs, Head-rest for.....	E. T. Starr.....	207,316	Aug. 20, 1878	693	207	14	300
Dental engine.....	W. G. A. Bonwill.....	199,779	Jan. 29, 1878	1114	327	13	206
Dental engine.....	J. M. Stebbins.....	203,385	May 7, 1878	157	45	13	843
Dental engine, Electro-magnetic.....	S. S. White.....	202,497	Apr. 16, 1878	477	198	13	706
Dental-engine hand-piece.....	J. W. Gilbert.....	199,431	Jan. 22, 1878	741	218	13	140
Dental-engine hand-piece.....	J. Re Qua.....	199,469	Jan. 22, 1878	777	228	13	145
Dental-engine hand-piece.....	E. T. Starr.....	203,297	May 7, 1878	65	20	13	839
Dental-engine hand-piece.....	E. T. Starr.....	203,298	May 7, 1878	66	20	13	839
Dental-engine motor.....	A. H. Best.....	207,707	Sept. 3, 1878	125	38	14	305
Dental engines, Motor-cable for.....	B. M. Wilkerson.....	204,645	June 4, 1878	229	79	13	1043
Dental engines, Rocking-standard for.....	E. T. Starr.....	199,477	Jan. 22, 1878	786	231	13	147

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				Spec.	Dr'g.	Vol.	Page.
Dental foil, Package for transmission of .....	R. S. Williams .....	209,002	Oct. 15, 1878	600	175	14	580
Dental gold-filling .....	E. G. and L. Kearsing .....	203,921	May 21, 1878	742	214	13	934
Dental plate .....	S. C. Carter .....	201,748	Mar. 26, 1878	973	297	13	574
Dental plate .....	J. D. Fahnestock and L. A. Powell .....	200,445	Feb. 19, 1878	575	170	13	337
Dental plate .....	B. M. Wilkerson .....	207,699	Sept. 3, 1878	113	34	14	363
Dental plate-mold .....	G. F. Rees .....	200,760	Feb. 26, 1878	910	268	13	396
Dental plate-molds, Making .....	G. F. Reese .....	200,761	Feb. 26, 1878	912	.....	13	396
Dental plugger .....	J. M. Stebbins .....	203,667	May 14, 1878	465	132	13	891
Dental plugger, Electro-magnetic .....	W. G. A. Bonwill .....	209,006	Oct. 15, 1878	605	176	14	580
Dental pluggers, Motor for .....	S. W. Dennis .....	205,619	July 2, 1878	159	48	14	29
Dental pluggers, Motor for .....	E. Moreau and S. W. Dennis .....	205,289	June 25, 1878	932	277	13	1147
Dental plugging-instruments, Attachment for .....	S. W. Strohm .....	201,849	Mar. 26, 1878	1076	327	13	589
Dental purposes, Abrading-tool for .....	E. T. Starr .....	207,079	Aug. 13, 1878	435	135	14	263
Dental purposes, Apparatus for reducing metal for .....	W. B. Slayton .....	205,508	July 2, 1878	45	14	14	15
Dental rubber-dam clamp .....	C. E. Buscy .....	207,103	Aug. 20, 1878	481	144	14	273
Dental tool .....	R. Arthur .....	205,462	July 2, 1878	1	1	14	9
Dental tool .....	E. T. Starr .....	203,858	May 21, 1878	677	192	13	925
Dental-tool holder .....	W. S. How .....	203,733	May 14, 1878	534	151	13	899
Dentist's cabinet .....	B. M. Wilkerson .....	205,938	July 9, 1878	525	150	14	79
Dentists, Slab and bottle-holder for .....	E. F. Hanks .....	200,829	Mar. 5, 1878	15	5	13	417
Dentists' tools for cleaning nerve-cavities, Manufacture of .....	R. B. Donaldson .....	202,006	Apr. 2, 1878	142	41	13	619
Depot-platform .....	L. J. Swett .....	201,571	Mar. 19, 1878	786	229	13	542
Derrick .....	T. Powell .....	199,660	Jan. 29, 1878	1005	292	13	189
Derrick for hay-stackers .....	A. J. Marks .....	199,301	Jan. 15, 1878	604	176	13	110
Derrick, Portable .....	W. Cooke .....	201,997	Apr. 2, 1878	134	89	13	618
Derrick, Portable .....	W. Cooke .....	201,998	Apr. 2, 1878	136	89	13	618
Derrick, Portable .....	R. McCord, jr., and G. W. Alexander .....	207,292	Aug. 20, 1878	671	199	14	298
Derrick, Portable .....	A. McHarry .....	198,895	Jan. 1, 1878	175	50	13	36
Derrick, Wagon .....	J. D. Winters .....	203,974	May 21, 1878	799	229	13	941
Desk .....	H. E. Moon .....	208,919	Oct. 15, 1878	511	148	14	568
Desk .....	G. and J. Runton .....	203,649	May 14, 1878	445	126	13	889
Desk .....	J. D. Tatem .....	199,236	Jan. 15, 1878	530	158	13	100
Desk .....	I. Whitbeck .....	209,533	Oct. 29, 1878	1187	345	14	670
Desk, Cabinet .....	J. A. Moore .....	199,089	Jan. 8, 1878	375	111	13	75
Desk, Satchel .....	A. O. Kaplan .....	204,492	June 4, 1878	69	24	13	1022
Desk, School .....	R. K. Curtis .....	202,934	Apr. 30, 1878	1184	342	13	777
Desk, School .....	J. Edgar .....	204,207	May 28, 1878	1075	306	13	979
Desk, School .....	G. Elsey .....	203,252	May 7, 1878	16	6	13	823
Desk, School .....	F. T. June .....	198,922	Jan. 1, 1878	266	58	13	40
Desk, School .....	E. Kimball .....	209,951	Nov. 12, 1878	449	136	14	745
Desk, School .....	H. Merz .....	204,444	June 4, 1878	29	10	13	1017
Desk, School .....	J. P. Pies .....	204,082	May 21, 1878	916	262	13	955
Desk, School .....	F. A. Wilber .....	206,378	July 23, 1878	1048	361	14	153
Desk slate-holder .....	M. M. Rice and J. Labar .....	204,505	June 4, 1878	79	27	13	1024
Dessert-maker .....	W. H. Silver .....	203,081	Apr. 30, 1878	1325	385	13	795
Detector: .....	.....	.....	.....	.....	.....	.....	.....
See Coin-detector. Waste-water detector.	.....	.....	.....	.....	.....	.....	.....
Time-detector. Watchman's detector.	.....	.....	.....	.....	.....	.....	.....
Detergent .....	C. C. Parsons .....	210,208	Nov. 26, 1878	754	.....	14	793
Detergent composition .....	J. Daymon .....	203,712	May 14, 1878	513	.....	13	897
Diagrams, Instrument for transmitting .....	J. M. Wolbrecht .....	201,473	Mar. 19, 1878	681	208	13	528
Die: .....	.....	.....	.....	.....	.....	.....	.....
See Jeweler's die. Screw-cutting die.	.....	.....	.....	.....	.....	.....	.....
Die for forming articles of plastic material .....	G. L. Winn and J. Bliss .....	199,340	Jan. 15, 1878	643	188	13	116
Die for molding plastic substances .....	M. Carty .....	200,986	Mar. 5, 1878	161	52	13	440
Diffusion apparatus .....	R. Sieg .....	210,153	Nov. 19, 1878	685	203	14	780
Digester .....	M. Cziner .....	206,391	July 30, 1878	1078	308	14	161
Digger: .....	.....	.....	.....	.....	.....	.....	.....
See Post-hole digger. Potato-digger.	.....	.....	.....	.....	.....	.....	.....
Digging implement, Combination .....	J. P. McCann .....	208,749	Oct. 8, 1878	312	90	14	538
Digging-machine .....	J. Coast .....	201,499	Mar. 19, 1878	707	215	13	532
Dining and laundry table combined .....	S. W. Steves .....	202,294	Apr. 9, 1878	461	135	13	668
Direct-acting engine and pump .....	A. Carr and J. Arthur .....	208,291	Sept. 24, 1878	782	228	14	460
Dish, Butter .....	A. C. Lippitt .....	199,214	Jan. 15, 1878	517	152	13	97
Dish, Covered .....	S. W. Babbitt .....	199,772	Jan. 29, 1878	1108	325	13	205
Dish, Covered .....	S. W. Babbitt .....	204,784	June 11, 1878	380	113	13	1067
Dish, Covered .....	J. Jepson .....	209,268	Oct. 22, 1878	900	262	14	626
Dish, Covered .....	W. C. Homan .....	207,522	Aug. 27, 1878	928	272	14	335
Dish, Covered .....	S. W. Babbitt .....	199,010	Jan. 8, 1878	301	88	13	62
Dish, Covered butter .....	G. O. Cole .....	209,864	Nov. 12, 1878	361	108	14	733
Dish, Fruit-vender's .....	E. S. Hampton .....	199,704	Jan. 29, 1878	1048	306	13	195
Dish-washer .....	J. B. Smith .....	205,004	June 18, 1878	627	184	13	1102
Dishes, Device for greasing baking .....	T. L. Sturtevant .....	205,440	June 25, 1878	1089	322	13	1108
Disintegrating-mill .....	D. C. Ebaugh .....	198,764	Jan. 1, 1878	41	11	13	14
Disintegrating or mixing machine .....	G. Göbel .....	202,433	Apr. 16, 1878	619	181	13	694
Distance and velocity recorder .....	W. F. Heywood .....	201,608	Mar. 26, 1878	841	255	13	554
Distance-register for vehicles .....	H. Frasch .....	205,792	July 9, 1878	370	167	14	59
Distillation of oils, Apparatus for .....	J. Wallace .....	199,006	Jan. 8, 1878	297	87	13	62
Distilling apparatus .....	C. B. Stough .....	205,439	June 25, 1878	1087	322	13	1167
Ditcher .....	O. T. Davies .....	202,416	Apr. 16, 1878	509	176	13	692
Ditcher and cultivator combined .....	H. W. Hill .....	203,042	Apr. 30, 1878	1289	373	13	790
Ditches, Machine for opening .....	M. J. Anstin .....	198,785	Jan. 1, 1878	69	18	13	18
Ditching-machine .....	H. Gonellaz .....	204,894	June 18, 1878	519	152	13	1088
Ditching-machine .....	J. W. Humphreys .....	198,983	Jan. 8, 1878	272	78	13	58
Ditching-machine .....	J. W. Humphreys .....	208,682	Oct. 8, 1878	243	69	14	529
Ditching-machine .....	T. F. McGough .....	202,661	Apr. 23, 1878	886	254	13	735
Ditching-machine .....	T. F. Randolph .....	199,106	Jan. 8, 1878	389	116	13	77
Ditching-machine .....	A. Renetzky .....	203,777	May 14, 1878	581	117	13	905



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Ditching-machine	B. F. Sherrick	207, 137	Aug. 20, 1878	511	154	14	277
Ditching-machine	W. Smith	200, 579	Feb. 19, 1878	706	207 208	13	357
Ditching-machine	G. E. Stewart	202, 200	Apr. 9, 1878	365	167	13	654
Ditching-machine	J. H. Wilson	207, 576	Aug. 27, 1878	768	229	14	315
Ditching-machine	J. F. Watring	201, 474	Mar. 19, 1878	683	209	13	329
Divided wheel	V. Thorpe	208, 439	Sept. 24, 1878	935	274	14	480
Dock	J. C. Bell and P. Costello	207, 843	Sept. 10, 1878	276	85	14	387
Dock, Dry	J. E. Simpson	204, 689	June 11, 1878	274	85	13	1654
Dock, Floating	J. L. Clark and J. Standfield	210, 185	Nov. 26, 1878	730	217	14	790
Doffer-comb for carding-engines	J. Hibbert	208, 598	Oct. 1, 1878	144	42	14	508
Doffer-combs, Mechanism for operating	F. G. Bates and L. E. Hartmann	206, 073	July 16, 1878	676	195 196	14	103
Doffer-combs, Mechanism for operating	E. Wright	208, 946	Oct. 15, 1878	541	159	14	572
Dog-power	F. K. Traxler	202, 679	Apr. 23, 1878	906	259	13	737
Doll	M. A. Steuber	205, 314	June 25, 1878	962	285	13	1151
Domestic boiler	J. B. Godwin	210, 318	Nov. 26, 1878	867	255	14	808
Domestic boilers, &c., Making copper bottoms for	T. and T. L. James	200, 727	Feb. 26, 1878	881	259	13	391
Door	R. W. Sempole	203, 202	Apr. 30, 1878	1455	425	13	812
Door and window fastening	H. Bergman	199, 685	Jan. 29, 1878	1029	300	13	192
Door-alarm	C. J. Elliott	208, 578	Oct. 1, 1878	126	36, 37	14	506
Door-alarm	F. C. Renner	206, 899	Aug. 13, 1878	269	82	14	243
Door-bolt	F. Davis	202, 158	Apr. 9, 1878	327	96	13	649
Door-bolt	H. M. Moffett	203, 360	May 7, 1878	128	37	13	838
Door-check	J. W. Craig	198, 931	Jan. 8, 1878	222	63	13	50
Door-check	J. R. Watkins	203, 302	May 7, 1878	72	22	14	830
Door-check	W. Watson	205, 931	July 9, 1878	520	147	14	78
Door-check	C. S. Whipple	204, 643	June 4, 1878	219	70	13	1043
Door-hanger	A. C. Arnold	210, 485	Dec. 3, 1878	96	24	14	836
Door-hanger	S. H. and E. Y. Moore	207, 765	Sept. 3, 1878	185	56	14	372
Door-hanger	C. W. Pierce	198, 997	Jan. 8, 1878	289	84	13	60
Door-hanger	E. Prescott	205, 763	July 9, 1878	338	98	14	55
Door-hanger	H. E. Richards	202, 587	Apr. 16, 1878	788	227 228	13	714
Door-holding device	O. Dorsey	210, 764	Dec. 10, 1878	414	115	14	886
Door-lock	J. B. Felter	199, 048	Jan. 8, 1878	336	98, 99	13	68
Door lock, Sliding	H. Wadsworth	200, 366	Feb. 12, 1878	490	144	13	316
Door lock, Sliding	J. W. Schoonmaker	200, 768	Feb. 26, 1878	916	270	13	397
Door locks and latches, Spindle and fastening for	M. C. and S. S. Niles	202, 574	Apr. 16, 1878	775	223	13	713
Door-plate	B. A. Wilson	200, 810	Feb. 26, 1878	958	283	13	403
Door-pull, Sliding	A. H. Elwell	208, 725	Oct. 8, 1878	287	82	14	535
Door-securer	G. W. Alexander	201, 586	Mar. 26, 1878	817	249	13	551
Door-securer	W. Hinchliffe	209, 261	Oct. 22, 1878	890	260	14	625
Door-securer	W. A. Ingalls	208, 176	Sept. 17, 1878	647	190	14	449
Door-securer	W. D. Rumsey	207, 073	Aug. 13, 1878	430	133	14	263
Door-sill and weather-strip	E. Handley and T. G. Orwig	204, 434	June 4, 1878	19	7	13	1015
Door, Sliding	G. R. Kidder	203, 051	Apr. 30, 1878	1295	376	13	791
Door, Sliding	S. Smith	200, 001	Feb. 5, 1878	107	35	13	250
Door-spring	Z. Cobb	201, 500	Mar. 19, 1878	708	216	13	532
Door-spring	C. Ferchlandt	202, 099	Apr. 9, 1878	258	75	13	640
Door-spring	H. C. Jones	202, 033	Apr. 2, 1878	171	50	13	624
Door-spring	A. W. Pierce	199, 740	Jan. 29, 1878	1078	316	13	200
Door-spring	F. J. Randall	209, 713	Nov. 5, 1878	190	56	14	706
Door-spring	O. Seely	204, 382	May 28, 1878	1249	356	13	1001
Door-spring	H. C. Steinhoff	199, 383	Jan. 22, 1878	696	204	13	132
Door-spring	L. Threlfall	200, 107	Feb. 5, 1878	218	67	13	266
Door-spring	H. Knowlton	199, 451	Jan. 22, 1878	758	223	13	142
Doors, &c., Manufacture of	J. Springer	199, 871	Jan. 29, 1878	1201	353	13	219
Doors, Roller attachment for sliding	A. K. Rider	205, 906	July 9, 1878	492	140	14	75
Double-tree clevis	A. Rosier	202, 552	May 28, 1878	1118	319	13	985
Doubling and twisting machines, Stop-motion for	T. Kershaw	204, 250	Apr. 16, 1878	753	217	13	711
Dough machine, Soft	H. Duches	209, 963	Nov. 19, 1878	477	144	14	732
Dough-mixer	B. F. Sparrow	206, 275	July 23, 1878	924	262	14	138
Dough-mixer	J. M. Stanyan	201, 460	Mar. 19, 1878	670	204	13	526
Dough, Preparing	M. Meinhold	204, 065	May 21, 1878	896	261	13	953
Dough-raiser	W. J. Snyder	206, 274	July 23, 1878	923	261	14	138
Dough-raiser	J. Whitehead	200, 957	Mar. 5, 1878	132	43	13	430
Dovetailing-machine	C. Stengel	199, 117	Jan. 8, 1878	408	120	13	70
Dowel-pin	B. F. Allen	201, 378	Mar. 19, 1878	589	181	13	515
Draft apparatus, Artificial	J. B. Andrews	210, 740	Dec. 10, 1878	388	106	14	883
Draft-equalizer	M. A. Andrews	203, 871	May 21, 1878	687	196	13	924
Draft-equalizer	B. C. Bradley	199, 142	Jan. 15, 1878	449	132	13	85
Draft-equalizer	J. Branning	204, 289	May 28, 1878	1153	329	13	989
Draft-equalizer	L. O. Brekke	209, 007	Oct. 15, 1878	607	177	14	581
Draft-equalizer	D. S. Cole	209, 657	Nov. 5, 1878	134	39	14	609
Draft-equalizer	H. D. Cress	202, 705	Apr. 23, 1878	933	266	13	749
Draft-equalizer	A. J. F. Ehrlich	199, 045	Jan. 8, 1878	332	98	13	64
Draft-equalizer	L. W. Frederick	202, 432	Apr. 16, 1878	618	181	13	694
Draft-equalizer	C. Leach	207, 611	Sept. 3, 1878	26	10	14	332
Draft-equalizer	M. Lewis	206, 737	Aug. 6, 1878	81	26	14	217
Draft-equalizer	M. Scott	209, 296	Oct. 22, 1878	926	270	14	629
Draft-equalizer	J. Sebastian	203, 380	May 7, 1878	151	43	13	841
Draft-equalizer	J. A. Stephens	200, 629	Feb. 26, 1878	772	227	13	375
Draft-equalizer	J. N. Travis	202, 075	Apr. 2, 1878	214	63	13	629
Draft-equalizer	A. Winston	206, 696	Aug. 6, 1878	41	12	14	211
Draft-equalizer for horse-powers	L. Dodge	200, 607	Feb. 26, 1878	754	221	13	373
Draft-equalizer, Three-horse	W. A. Laird	202, 555	Apr. 16, 1878	757	219	13	711
Draft-evener	M. O. Smith	210, 160	Nov. 19, 1878	687	204	14	739
Draft-pipe for heaters	M. A. Shepard	204, 170	May 28, 1878	1029	293	13	971
Drain and waste-pipe trap, House	J. H. Shedd	202, 287	Apr. 9, 1878	454	133	13	667
Drain, sewer, &c., trap	J. Sargent	200, 093	Feb. 5, 1878	204	64	13	265
Drain-trap	J. H. Blessing	207, 482	Aug. 27, 1878	880	250 260	14	339
Drain, Under	W. B. Henning	204, 038	May 21, 1878	870	249	13	939
Drain, waste, and sewer pipe trap	G. E. Waring, Jr.	204, 928	June 18, 1878	556	161	13	1092



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Draw-gage .....	J. H. Tays .....	205,316	June 25, 1878	964	285	13	1151
Drawer .....	H. Cohn .....	204,714	June 11, 1878	300	93	13	1058
Drawer, Bureau .....	C. Harris .....	199,825	Jan. 29, 1878	1162	341	13	213
Drawer-lock .....	W. I. Ludlow .....	200,319	Feb. 12, 1878	439	131	13	308
Drawer-pull .....	T. S. Alexander .....	200,640	Nov. 5, 1878	115	34	14	696
Drawer-support .....	J. E. Merriman .....	199,086	Jan. 8, 1878	372	110	13	75
Drawing and spinning machines, Clearer-roll frame for.	J. W. Dane .....	203,894	May 21, 1878	711	203	13	929
Drawing-frame stop-motion .....	F. Twitchell and C. A. Richardson.	201,303	Mar. 12, 1878	494	152	13	495
Drawing-roll saddle .....	W. S. Kelley .....	205,558	July 2, 1878	102	29	14	22
Drawing-heads, Stop-motion for railway .....	E. Dixon .....	205,062	June 18, 1878	683	201	13	1109
Drawing-heads, Stop-motion for railway .....	C. A. Tabor .....	199,878	Jan. 29, 1878	1208	354	13	220
Dredge .....	F. E. Tabor .....	203,389	May 7, 1878	163	47	13	843
Dredge-bottle .....	J. Keefe .....	206,246	July 23, 1878	890	254	14	133
Dredge-chock .....	W. Sellers .....	208,125	Sept. 17, 1878	588	174	14	433
Dredger .....	R. W. Harrison .....	210,323	Nov. 26, 1878	876	257	14	809
Dredger for salt, pepper, &c. ....	T. B. Carr .....	202,228	Apr. 9, 1878	394	115	13	659
Dredger, Vacuum .....	L. Morgan .....	207,434	Aug. 27, 1878	829	245	14	323
Dredging and ditching machine .....	A. Crosby .....	203,892	May 21, 1878	708	203	13	929
Dredging apparatus, Hydraulic .....	D. Bridges .....	210,448	Dec. 3, 1878	62	15	14	832
Dredging-bucket .....	E. Smith .....	205,584	July 2, 1878	126	38	14	25
Dredging-machine .....	T. Symonds .....	198,957	Jan. 8, 1878	247	71	13	54
Dredging-machine .....	G. W. Cummings .....	209,159	Oct. 22, 1878	793	230	14	611
Dredging-machine .....	J. B. Eads .....	208,894	Oct. 15, 1878	484	139 } 140 } 366 } 367 }	14	565
Dredging-machine .....	T. M. Jones .....	206,575	July 30, 1878	1275	366 } 367 }	14	186
Dredging-machine .....	T. L. Lee .....	204,584	June 4, 1878	155	51	13	1035
Dredging-machine .....	J. Menge .....	199,305	Jan. 15, 1878	607	177	13	110
Dredging-scows, Hopper for pneumatic .....	R. Cartwright .....	200,821	Mar. 5, 1878	7	2	13	416
Dredging-tongs .....	C. A. Scanlan .....	201,559	Mar. 19, 1878	771	235	13	540
Dress-shield .....	G. W. Wood .....	205,024	June 18, 1878	645	190	13	1104
Dress-train supporter .....	A. W. Thomas .....	199,170	Jan. 15, 1878	475	140	13	90
Drier:							
See Barley and malt drier.	Fruit and hop drier.						
Clothes-drier.	Grain and middlings drier.						
Fish-drier.	Lumber-drier.						
Fruit-drier.	Stocking-drier.						
Drier .....	A. Mey .....	205,803	July 9, 1878	383	110 } 111 }	14	61
Driers, Paddle for .....	B. F. Brightman .....	210,491	Dec. 3, 1878	102	26	14	837
Drill:							
See Coal-drill.	Oil-drill.						
Corn-drill.	Railway-track drill.						
Expanding-drill.	Ratchet-drill.						
Grain-drill.	Rock-drill.						
Guano-drill.	Seed-drill.						
Hand-drill.	Twist-drill.						
Metal-drill.							
Drill and corn-planter, Combined .....	A. and M. Runstetler .....	210,214	Nov. 26, 1878	758	225 } 226 }	14	793
Drill and planter combined .....	G. W. Grimes .....	199,200	Jan. 8, 1878	505	148	13	95
Drill and planter combined .....	G. W. Grimes .....	204,488	June 4, 1878	65	22, 23	13	1022
Drill-winder .....	A. K. Rider .....	201,449	Mar. 19, 1878	659	201	13	525
Drill stand .....	S. W. Davis .....	210,104	Nov. 12, 1878	630	187	14	772
Drill-tooth attachment .....	S. Frank .....	208,583	Oct. 1, 1878	131	38	14	506
Drilling, laying foundations, &c., Apparatus for } subaqueous.	J. H. Striedinger, J. R. F. Kelly, } and K. Kotrow.	201,569	Mar. 19, 1878	783	238 } 239 }	13	542
Drilling machine, Metal .....	E. M. Boynton, G. M. Coburn, } and T. F. Carver.	209,646	Nov. 5, 1878	122	36	14	697
Drilling machine, Metal .....	D. W. Pond .....	204,248	May 28, 1878	1114	318	13	984
Drilling machine, Metal .....	A. J. Smart .....	206,979	Aug. 13, 1878	339	104 } 105 }	14	252
Drilling-machine, Steam .....	S. G. Bryer .....	205,998	July 16, 1878	603	174	14	94
Drinking-fountain .....	W. F. Cunningham .....	199,800	Jan. 29, 1878	1138	334	13	209
Drinking-fountain .....	J. Reid .....	203,941	May 21, 1878	761	219	13	936
Drop-light .....	J. Brown .....	210,912	Dec. 17, 1878	598	165	14	918
Drop-light .....	H. Iden .....	210,781	Dec. 10, 1878	429	119	14	888
Dropper:							
See Corn-dropper.	Harvester-dropper.						
Fertilizer-dropper.	Seed-dropper.						
Drum, Heating .....	W. F. Barker .....	210,082	Nov. 19, 1878	605	180	14	769
Drum, Heating .....	G. B. Follett .....	205,953	July 16, 1878	556	159	14	88
Drum, Heating .....	W. L. Phillips .....	210,627	Dec. 10, 1878	271	73	14	868
Drum, Heating .....	W. A. Swaren .....	200,948	Mar. 5, 1878	125	41	13	435
Drum, Stove-pipe .....	G. H. Simon .....	207,560	Aug. 27, 1878	970	284	14	340
Dry-closet .....	P. McMackin .....	202,278	Apr. 9, 1878	445	130	13	665
Drying and heating gravel, &c., Apparatus for .....	W. Morgan .....	210,139	Nov. 19, 1878	666	198	14	778
Drying apparatus .....	D. Asbury .....	206,521	July 30, 1878	1217	350	14	178
Drying apparatus .....	T. Clegg .....	206,389	July 30, 1878	1076	307	14	161
Drying cereals, Apparatus and process for .....	F. A. Luckenbach .....	210,793	Dec. 10, 1878	440	123	14	890
Drying-kiln .....	E. T. Gennert .....	204,211	May 28, 1878	1079	307	13	980
Drying-machine .....	G. N. Bliss .....	203,879	May 21, 1878	695	199	13	927
Dummy .....	H. H. Baker .....	208,881	Oct. 15, 1878	468	135	14	563
Dummy, Adjustable .....	J. N. Lawrence .....	204,833	June 11, 1878	435	127	13	1073
Dummy-engine .....	J. F. Thomas .....	208,213	Sept. 17, 1878	682	201	14	445
Dumping-boat, Reversible .....	J. L. Ketcham .....	200,920	Mar. 5, 1878	100	34	13	430
Dust-pan .....	E. K. Goss .....	210,849	Dec. 17, 1878	510	144	14	908
Dust-pan .....	G. Macardlo .....	202,277	Apr. 9, 1878	444	130	13	665
Dust-pan .....	E. E. Mann .....	202,357	Apr. 16, 1878	546	159	13	684
Dust-shovel .....	J. A. Johnstry .....	203,277	May 7, 1878	42	13	13	826
Dusters, Feathers for .....	G. M. Richmond .....	209,080	Oct. 15, 1878	693	201	14	592
Dye-stuff, Ethyl-rosaniline .....	H. Caro .....	204,798	June 11, 1878	394	13	13	1068
Dye-stuff or coloring-matter .....	L. Graf .....	203,140	Apr. 30, 1878	1384	13	13	803
Dye-stuffs from methyl-aniline. Production of .....	H. Caro .....	204,796	June 11, 1878	391	13	13	1067
Dye-stuffs produced from naphthylamine .....	H. Caro .....	204,799	June 11, 1878	395	13	13	1068

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Dyeing apparatus .....	A. V. Hysore .....	205, 272	June 25, 1878	912	270	13	1145
Dynamometer for testing the strength of yarn .....	M. Lee .....	201, 802	Mar. 28, 1878	1028	314	13	582
<b>E.</b>							
Ear-piercer .....	A. Gipperich .....	205, 185	June 25, 1878	823	244	13	1133
Ear-ring .....	W. P. Dolloff .....	208, 968	Oct. 15, 1878	568	165	14	576
Ear-ring cover .....	A. Hessels .....	207, 569	Sept. 10, 1878	308	94	14	391
Earth-boring machine .....	W. H. Yarborough .....	198, 911	Jan. 1, 1878	195	55	13	38
Earth-closet .....	R. W. Riddle .....	203, 943	May 21, 1878	763	220	13	937
Earthenware, &c., Applying colors to .....	A. A. X. Okolowicz .....	208, 418	Sept. 24, 1878	913	147	14	477
Easel .....	J. C. Ripka and N. Van Rees .....	205, 907	July 9, 1878	494	141	14	75
Eave-trough former .....	G. Eckel .....	203, 433	May 7, 1878	209	60	13	849
Eave-trough hanger .....	J. P. Spiss .....	206, 495	July 30, 1878	1194	342	14	175
Eccentric, Anti-friction .....	M. Scharfberg .....	210, 969	Dec. 17, 1878	601	182	14	925
Edger, Gang .....	S. P. Randolph .....	201, 198	Mar. 12, 1878	378	117	13	479
Educational appliances .....	C. A. Bailey .....	203, 988	May 21, 1878	815	233	13	943
Effervescent liquids, Apparatus for dispensing .....	A. Habernicht .....	202, 543	Apr. 16, 1878	745	215	13	710
Effervescent-liquid-drawing apparatus .....	F. W. Wiscbrock .....	201, 141	Mar. 12, 1878	327	100	13	471
Effervescent-liquid-drawing apparatus .....	F. W. Wiscbrock .....	201, 212	Mar. 12, 1878	303	121	13	481
Egg and fruit carrier .....	O. L. Parmenter .....	205, 898	July 9, 1878	483	138	14	73
Egg and fruit carrier .....	O. Ricklefsen .....	199, 746	Jan. 29, 1878	1084	818	13	201
Egg-beater .....	M. D. Hamble .....	205, 850	July 9, 1878	440	125	14	64
Egg-beater .....	R. N. Harrison .....	200, 260	Feb. 12, 1878	407	121	13	364
Egg-beater .....	J. H. Hughes .....	203, 153	Apr. 30, 1878	1400	409	13	805
Egg-beater .....	H. C. Mann .....	206, 742	Aug. 6, 1878	86	27	14	217
Egg-beater .....	G. Mooney .....	204, 498	June 4, 1878	73	25	13	1023
Egg-beater .....	W. H. Wicster .....	209, 205	Oct. 22, 1878	841	242	14	617
Egg-box .....	R. L. Edwards and J. Lee .....	201, 601	Mar. 26, 1878	833	253	13	533
Egg-carrier .....	D. E. Dutrow .....	200, 704	Feb. 26, 1878	837	252	13	388
Egg-carrier .....	J. T. Fogg .....	202, 253	Apr. 9, 1878	420	122	13	662
Egg-carrier .....	M. Laffin and S. Elliott .....	201, 426	Mar. 19, 1878	639	195	13	522
Egg-carrier .....	J. H. McCarron .....	203, 356	May 7, 1878	124	36	13	837
Egg-carrier .....	P. Schulze .....	201, 453	Mar. 19, 1878	664	202	13	536
Egg-carrier .....	W. W. Smith .....	201, 062	Mar. 5, 1878	241	76	13	432
Egg-carrier .....	J. L. Stevens .....	201, 508	Mar. 19, 1878	782	238	13	542
Egg-carrier .....	R. R. Wilkinson .....	199, 339	Jan. 15, 1878	642	188	13	116
Egg-carrier .....	R. R. Wilkinson .....	204, 934	June 18, 1878	560	163	13	1093
Egg carrier and tester .....	C. H. Wymun .....	202, 132	Apr. 9, 1878	293	86	13	645
Egg-carriers, Fastening for .....	N. C. Amsden .....	202, 213	Apr. 9, 1878	377	111	13	856
Egg-cases, &c., Box-fastener for .....	A. Hurst and F. W. Smith .....	201, 788	Mar. 26, 1878	1015	310	13	580
Egg-cases, Tray for .....	D. E. Dutrow .....	203, 431	May 7, 1878	207	59	13	848
Egg-cup .....	W. Starkey .....	201, 364	Mar. 19, 1878	576	177	13	513
Egg-opener .....	G. W. H. Krey .....	207, 426	Aug. 27, 1878	823	243	14	322
Egg-poacher .....	H. J. Schmid .....	210, 154	Nov. 19, 1878	682	202	14	789
Egg-tester .....	E. Holloway .....	199, 043	Jan. 29, 1878	988	287	13	166
Egg-tester .....	F. B. Harris .....	205, 547	July 2, 1878	88	25	14	20
Egg-tester .....	C. L. Westerman .....	204, 117	May 21, 1878	951	272	13	960
Eggs, Composition for preserving .....	O. A. Stempel .....	203, 790	May 14, 1878	585	180	13	907
Eggs, Process and compound for preserving .....	P. Reden and B. Thole .....	207, 623	Sept. 3, 1878	89	28	14	254
Eggs, Treating preserved .....	O. A. Stempel .....	205, 813	June 25, 1878	962	281	13	1151
Electric-stickers, Ready-cut blank for .....	J. Arnold .....	202, 775	Apr. 23, 1878	1002	286	13	750
Electric alarm for steam-boilers .....	P. Grimm, W. I. Fancher, and H. K. Roberts .....	211, 008	Dec. 17, 1878	704	194	14	931
Electric alarms and annunciators, Switch for combined .....	P. Erwin .....	208, 161	Sept. 17, 1878	630	185	14	438
Electric apparatus for opening doors of engine-houses .....	S. V. Dickinson .....	209, 610	Nov. 5, 1878	78	23	14	691
Electric bells, Polarized armature for .....	T. A. Watson .....	210, 886	Dec. 17, 1878	559	156	14	913
Electric circuit, Transmitting rhythmical vibrations in an .....	E. Gray .....	205, 378	June 25, 1878	1028	304	13	1159
Electric conducting-cords, Tip for flexible .....	L. E. Heaton .....	199, 827	Jan. 29, 1878	1163	342	13	213
Electric light .....	P. O. Jenkins .....	205, 962	July 10, 1878	565	161	14	89
Electric light .....	E. Weston .....	210, 380	Nov. 26, 1878	944	274	14	817
Electric-light regulator .....	W. E. Sawyer and A. Man .....	205, 305	June 25, 1878	951	282	13	1150
Electric lights, Carbon-regulator for .....	J. H. Rogers .....	210, 213	Nov. 26, 1878	757	225	14	793
Electric lights, Electrode for .....	O. Lugo .....	207, 753	Sept. 3, 1878	172	53	14	371
Electric lights, Electrode for .....	O. Lugo .....	207, 754	Sept. 3, 1878	174	53	14	371
Electric lights, Switch for .....	W. E. Sawyer and A. Man .....	210, 152	Nov. 19, 1878	679	202	14	779
Electric lighting apparatus .....	J. King .....	200, 545	Feb. 19, 1878	672	198	13	352
Electric lighting system .....	W. E. Sawyer and A. Man .....	205, 303	June 25, 1878	947	281	13	1149
Electric lock .....	P. Rowe .....	199, 255	Jan. 15, 1878	553	163	13	102
Electric machine, Dynamo .....	E. Weston .....	201, 968	Apr. 2, 1878	103	30, 31	13	614
Electric machine, Dynamo .....	E. Weston .....	209, 094	Oct. 15, 1878	706	204	14	594
Electric machine, Dynamo .....	E. Weston .....	209, 532	Oct. 29, 1878	1184	344	14	669
Electric machine, Magneto .....	C. F. Brush .....	203, 412	May 7, 1878	184	53	13	845
Electric machine, Magneto .....	H. J. Smith .....	201, 296	Mar. 12, 1878	486	150	13	494
Electric machines, Armature for dynamo .....	C. F. Brush .....	203, 413	May 7, 1878	185	54	13	846
Electric meter .....	W. E. Sawyer .....	210, 151	Nov. 19, 1878	677	202	14	779
Electric meter for measuring the current of electricity .....	J. B. Fuller .....	210, 310	Nov. 26, 1878	865	254	14	847
Electric motors, Pedal-switch for controlling .....	C. A. Hussey .....	210, 939	Dec. 17, 1878	625	173	14	921
Electric recorder .....	L. Dunne .....	206, 304	July 23, 1878	959	271	14	143
Electric register and time-recorder .....	W. A. Wilson .....	203, 689	May 14, 1878	486	138	13	894
Electric registers, Signal-box for .....	J. B. Johnson and H. Whittemore .....	210, 258	Nov. 26, 1878	804	238	14	799
Electric alarm-striking device .....	J. A. Swift .....	208, 275	Sept. 24, 1878	768	224	14	458
Electrical conductors, Connecting-tip for .....	J. A. Nickerson .....	203, 931	May 21, 1878	752	217	13	935
Electrical currents, Apparatus for neutralizing the effects of induced .....	C. H. Wilson .....	201, 374	Mar. 19, 1878	583	180	13	514
Electricity, Induction apparatus for lighting by .....	J. B. Fuller .....	210, 317	Nov. 26, 1878	866	254	14	808
Electro-deposition, Manufacture of articles produced by .....	J. W. Tufts .....	202, 969	Apr. 30, 1878	1220	352	13	781
Electrode, Glove .....	J. S. Morel .....	206, 474	July 30, 1878	1166	335	11	172
Electrotype shells, Pan for backing .....	M. Crane .....	207, 645	Sept. 3, 1878	65	19	14	357

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Elevator:							
See Grain-elevator.	Ice-elevator.						
Hay-elevator.	Sand and earth elevator.						
Hose-elevator.	Sleeve-elevator.						
Hydraulic elevator.							
Elevator .....	D. Jenkins .....	209,400	Oct. 29, 1878	1042	303	14	649
Elevator .....	J. M. Johnston and R. Marshall .....	202,264	Apr. 9, 1878	429	125	13	604
Elevator .....	F. Koepe .....	206,251	July 23, 1878	894	255	14	134
Elevator .....	P. Sykes .....	206,052	July 16, 1878	656	190	14	101
Elevator .....	A. Whittemore .....	206,283	July 23, 1878	936	265	14	140
Elevator-boat .....	H. W. Caldwell and W. Watson .....	203,887	May 21, 1878	703	201	13	928
Elevator-brake .....	R. Marshall .....	207,291	Aug. 20, 1878	671	199	14	297
Elevator-brake .....	C. H. Mitchell .....	204,069	May 21, 1878	900	258	13	953
Elevator-bucket .....	W. J. Bennett .....	208,147	Sept. 17, 1878	612	181	14	436
Elevator-cup .....	O. D. Spalding .....	205,919	July 9, 1878	506	144	14	76
Elevator-grain-spout .....	F. M. Campbell .....	206,001	July 16, 1878	606	175	14	94
Elevator-track and self-discharging bucket, Combined	J. A. Brunner and A. Rich .....	198,966	Jan. 8, 1878	257	73	13	55
Elevators, &c., Combined clutch and brake of hoisting-drums for .....	J. S. Lane .....	203,744	May 14, 1878	546	154	13	901
Elevators, Ratcheted guide for .....	L. S. Graves .....	206,434	July 30, 1878	1125	322	14	167
Elevators, Safety attachment for .....	R. H. Hill .....	210,693	Dec. 10, 1878	337	92	14	876
Elevators, Safety-check for .....	J. Marshall .....	202,561	Apr. 16, 1878	762	220	13	712
Elliptic spring .....	J. Hargreaves .....	208,171	Sept. 17, 1878	642	188 189	14	439
Elliptic springs, Machine for bending .....	W. Harty .....	201,607	Mar. 26, 1878	840	255	13	554
Embalming, Apparatus for .....	A. H. Hatch .....	203,033	Apr. 30, 1878	1280	370	13	789
Embalming composition .....	R. J. McGowan .....	206,343	July 23, 1878	1009	.....	14	148
Embalming, Tubular needle for .....	S. Rodgers .....	207,551	Aug. 27, 1878	959	281	14	339
Embroidering-machine .....	I. Gröbli, C. A. Cafilisch, and J. Wehrli .....	203,142	Apr. 30, 1878	1385	402 403 404	13	803
Embroidering-machine .....	I. Gröbli, H. Rieter, jr., and J. Wehrli .....	203,143	Apr. 30, 1878	1388	404 405 406	13	804
Embroidering-machine .....	H. Rieter, J. Wehrli, and G. Gröbli .....	203,195	Apr. 30, 1878	1445	422 423	13	811
Embroidery-pattern .....	A. B. Rice .....	205,138	June 18, 1878	760	225	13	1120
Embroidery-pattern .....	R. T. Smith .....	207,141	Aug. 20, 1878	515	155	14	278
Emery-tools, Flux composition for .....	A. Caesar .....	201,910	Apr. 2, 1878	53	.....	13	606
Emery-wheel .....	G. Hart .....	201,778	Mar. 26, 1878	1007	307	13	579
Emery-wheel clamp .....	A. J. Robinson .....	201,949	Apr. 2, 1878	85	24	13	611
Enameling sheet-iron ware .....	F. G. and W. F. Niedringhaus .....	199,735	Jan. 29, 1878	1074	.....	13	199
Enameling sheet-iron ware .....	F. G. and W. F. Niedringhaus .....	200,626	Feb. 26, 1878	770	.....	13	375
End-gate fastening .....	F. Rock .....	208,928	Oct. 15, 1878	522	152	14	570
End-gate for grain-wagons .....	W. Ashton .....	203,101	Apr. 30, 1878	1341	390	13	798
End-gate, Wagon .....	D. Austin .....	207,095	Aug. 20, 1878	475	143	14	273
End-gate, Wagon .....	G. S. Cryne .....	210,756	Dec. 10, 1878	404	110	14	884
End-gate, Wagon .....	A. Gadbouis .....	210,112	Nov. 19, 1878	636	189	14	773
End-gate, Wagon .....	W. H. Parkin .....	206,966	Aug. 13, 1878	328	100	14	250
End-gate, Wagon .....	S. W. Perkins .....	204,079	May 21, 1878	911	260	13	955
Engine:							
See Air-engine.	Paper or rag engine.						
Air and steam engine.	Portable engine.						
Compound engine.	Pumping-engine.						
Dental engine.	Reciprocating engine.						
Direct-acting engine.	Road-engine.						
Dummy-engine.	Rock-drilling engine.						
Fire-engine.	Rotary engine.						
Gas-engine.	Steam-engine.						
Hot-air engine.	Traction-engine.						
Hydraulic engine.	Vocal engine.						
Marine engine.	Wind-engine.						
Oscillating-piston engine.							
Engraving-block .....	G. C. Setchell .....	203,856	May 21, 1878	674	191	13	924
Engraving-machine .....	J. F. McNally .....	210,348	Nov. 26, 1878	905	265 266	14	812
Envelope .....	W. L. Benham .....	200,853	Mar. 5, 1878	40	14	13	421
Envelope .....	J. P. Bligh .....	206,701	Aug. 6, 1878	47	14	14	212
Envelope .....	M. S. Chapman .....	204,422	June 4, 1878	8	3	13	1013
Envelope .....	J. Clowes .....	199,032	Jan. 8, 1878	321	94	13	65
Envelope .....	A. Daul .....	203,427	May 7, 1878	201	58	13	848
Envelope .....	M. J. Duffee .....	200,442	Feb. 19, 1878	571	169	13	337
Envelope .....	O. P. Hatfield .....	202,816	Apr. 23, 1878	1051	302	13	756
Envelope .....	M. Jacobsen .....	209,571	Nov. 5, 1878	39	10	14	686
Envelope .....	W. B. Keighton .....	205,869	July 9, 1878	453	129	14	70
Envelope .....	E. Ridge .....	202,194	Apr. 9, 1878	360	105	13	654
Envelope .....	J. Schade and B. H. Lockwood .....	204,256	May 28, 1878	1122	320	13	985
Envelope .....	M. J. Taylor .....	203,091	Apr. 30, 1878	1334	388	13	797
Envelope .....	J. H. Weaver .....	209,593	Nov. 5, 1878	59	18	14	688
Envelope and paper fastener .....	W. J. Westwood and G. Pileger .....	203,514	May 7, 1878	289	83	13	860
Envelope, Metallic postal .....	H. G. Pearson .....	210,959	Dec. 17, 1878	647	179	14	924
Epithem .....	B. A. Prophet .....	207,302	Aug. 20, 1878	681	.....	14	299
Escapement .....	W. A. Wales .....	204,400	May 28, 1878	1268	361	13	1004
Escutcheons, Machine for cutting .....	C. C. Hill .....	210,200	Nov. 26, 1878	745	221	14	799
Evaporating-pan .....	J. Griswold .....	201,110	Mar. 12, 1878	293	90	13	461
Evaporating-pan .....	A. D. Martin .....	204,745	June 11, 1878	334	101	13	1062
Evaporating-pan .....	W. A. Morrison .....	198,900	Jan. 1, 1878	185	52	13	37
Evaporating-pan .....	W. T. Phegley .....	203,556	May 14, 1878	359	101	13	878
Evaporator:							
See Fruit and vegetable evaporator.	Sirup-evaporator.						
Porous evaporator.	Stove-evaporator.						
Evaporator .....	F. Michael .....	208,624	Oct. 1, 1878	167	49	14	511
Evaporator and fruit-drier .....	J. B. Sweetland .....	209,146	Oct. 22, 1878	781	227	14	609

*Alphabetical list of inventions—Continued.*

Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Drig.	Vol.	Page.
Excavating and dredging machine	S. Ravenel	210,359	Nov. 26, 1878	919	268	14	814
Excavating-machine	J. T. Dougrine	208,893	Oct. 15, 1878	482	139	14	565
Excavating-machines, Supporting-frame for	H. T. Stock	210,724	Dec. 10, 1878	371	101	14	880
Excavator	C. Pontez	207,064	Aug. 13, 1878	422	130	14	262
Excavator	A. W. Terrill	209,432	Oct. 29, 1878	1078	313	14	654
Excavator and submarine plow	W. M. Smith	204,387	May 28, 1878	1254	357	13	1002
Exercising device	E. M. Folk	201,174	Mar. 12, 1878	355	109	13	476
Exercising-machine	S. M. Barnett	206,214	July 23, 1878	855	214	14	129
Exercising-machine	W. J. Britt	209,377	Oct. 29, 1878	1023	297	14	646
Exercising-machine	W. J. O. Bryon, jr	208,954	Oct. 15, 1878	553	161 162	14	574
Exercising-machine	O. S. Harmon	201,606	Mar. 26, 1878	839	254	13	554
Exercising-machine	J. G. Nicolay	208,485	Oct. 1, 1878	31	10	14	493
Exercising-machine	J. Preiss	199,982	Feb. 5, 1878	45	14	13	240
Exercising-machine	W. H. Willcox	203,973	May 21, 1878	799	229	13	941
Exhaust mechanism	V. H. Hallock	206,783	Aug. 6, 1878	132	41	14	223
Expanding-drill for boring blast-holes	J. Julien	207,122	Aug. 20, 1878	498	150	14	275
Explosive compound	S. J. Fowler	200,272	Feb. 12, 1878	390	13	13	301
Explosive compound	E. Monakay	203,482	May 7, 1878	260	13	13	856
Express-box	H. H. Kingsbury	207,969	Sept. 10, 1878	414	125	14	495
Extension-key	C. C. Coleman	200,512	Feb. 19, 1878	637	187	13	347
Extension-key	H. Wadsworth	203,223	Apr. 30, 1878	1473	431	13	814
Extension-lock for doors	J. Moore	204,070	May 21, 1878	901	258	13	954
Extension-table	H. W. Kinney	204,982	June 18, 1878	606	178	13	1099
Extension-table	J. B. Thurston	200,849	Mar. 5, 1878	36	12	13	420
Extension-table slide	H. W. McIntyre	207,055	Aug. 13, 1878	412	128	14	261
Extract-receivers, Floating cover for	J. Miller	203,180	Apr. 30, 1878	1429	417	13	899
Extractor:							
See Cap-extractor.	Nail-extractor.						
Cartridge-extractor.	Stump-extractor.						
Cork-extractor.							
Eye-shade	J. B. Ricketts	207,624	Sept. 3, 1878	40	13	14	354
Eye-glass, Watchmaker's	J. H. Mather	199,218	Jan. 15, 1878	521	153	13	97
Eye-glasses	E. J. Godefroy	207,116	Aug. 20, 1878	492	147	14	275
Eye-glasses	A. K. Hawkes	205,860	July 9, 1878	441	125	14	69
Eye-glasses	J. F. Traub	204,266	May 28, 1878	1130	323	13	986
Eyelet for securing buckles to straps	C. W. White	206,055	July 16, 1878	660	191	14	101
Eyelet-making machine	A. Delkescamp and F. B. Bradley	204,716	June 11, 1878	303	93, 94	13	1058
Eyeletting-machines, Punching and feeding device for	E. Woodard and E. D. Goodson	208,133	Sept. 17, 1878	598	177 178	14	434
F.							
Fabric:							
See Carpet fabric.	Roofing fabric.						
Pattern-marked	Textile fabric.						
fabric.							
Fabrics, Machine for cutting	A. Muehling and R. V. Davis	208,920	Oct. 15, 1878	512	149	14	569
Fabrics, Machine for opening, smoothing, spreading, and guiding.	W. Birch	198,787	Jan. 1, 1878	71	18	13	18
Fabrics, Machine for stretching	C. A. Luther	211,030	Dec. 17, 1878	737	202	14	994
Fabrics, Machine for stretching, dipping and drying.	J. D. McLean	207,192	Aug. 20, 1878	569	171	14	284
Face-protector Plate-glass	C. A. Kirtland	202,175	Apr. 9, 1878	343	100	13	651
Fan and caster, Combined	J. S. Letord	210,791	Dec. 10, 1878	439	122	14	890
Fan attachment	G. F. Wilson	201,318	Mar. 12, 1878	515	157	13	497
Fan attachment, Automatic	G. R. Kress	206,183	July 23, 1878	818	233	14	124
Fan, Automatic	R. C. Bryant	205,046	June 18, 1878	669	196	13	1107
Fan, Automatic	F. K. Collins	208,715	Oct. 8, 1878	278	79	14	533
Fan, Automatic	W. Duchemin	207,022	Aug. 13, 1878	383	118	14	257
Fan, Automatic	F. and I. Elkins	198,798	Jan. 1, 1878	81	21, 22	13	20
Fan, Automatic	J. Hay	198,938	Jan. 8, 1878	228	64, 65	13	51
Fan, Automatic	W. H. Love	209,696	Nov. 5, 1878	174	52	14	704
Fan, Automatic	G. A. C. Meyer	203,358	May 7, 1878	126	37	13	837
Fan, Automatic	I. Zettl	200,812	Feb. 26, 1878	960	283	13	404
Fan motor, Fly	H. A. Turner	205,701	July 2, 1878	255	76	14	41
Fanning-mill	P. A. Peer	203,067	Apr. 30, 1878	1310	381	13	793
Fare-box	W. H. Hornum	205,646	July 2, 1878	188	57	14	33
Fare-box	M. M. Moore	201,437	Mar. 19, 1878	649	198	13	523
Fare-box	J. B. Slawson	210,571	Dec. 3, 1878	200	53	14	849
Fare-box	J. E. White	205,022	June 18, 1878	642	189	13	1104
Fare-box	W. Zaehlinger	210,230	Nov. 26, 1878	774	230	14	795
Fare-controller, Conductor's	C. F. Peck	207,675	Sept. 3, 1878	92	28	14	360
Fare-register	J. Bluemel	203,881	May 21, 1878	697	199	13	928
Fare-register	C. B. Harris	206,565	July 30, 1878	1262	363 364	14	184
Fare-register	W. H. Hornum	207,740	Sept. 3, 1878	158	49	14	369
Fare-register and ticket-receiver	N. A. Ransom	203,773	May 14, 1878	575	162	13	905
Farm-gate	J. Coffits	208,225	Sept. 24, 1878	708	208	14	452
Farm-gate	H. W. Goodwin	206,942	Aug. 13, 1878	307	94	14	248
Farm-gate	J. Lepley	199,652	Jan. 29, 1878	998	291	13	188
Farm-gate	E. and F. H. Romans	205,211	June 25, 1878	849	252	13	1137
Farm-gate	S. S. and J. G. Sherman	199,322	Jan. 15, 1878	626	182	13	113
Farm-gate	S. C. Shoup	210,640	Dec. 10, 1878	283	78	14	899
Farm-gate	S. Shreffler, jr	207,078	Aug. 13, 1878	435	134	14	263
Farm-gate	J. E. Strong	205,438	June 25, 1878	1086	322	13	1167
Farm-gate	T. M. Wilson	202,973	Apr. 30, 1878	1224	354	13	782
Farm-gate and hanger	J. H. Buscher	202,328	Apr. 16, 1878	516	151	13	680
Fats, Apparatus for obtaining glycerine from	F. Sahlfeld	201,704	Mar. 26, 1878	929	285	13	567
Faucet	H. Alexander	207,931	Sept. 10, 1878	376	114	14	399
Faucet	A. Beausoliel and J. Moreau	205,342	June 25, 1878	995	294	13	1155
Faucet	E. Duchamp	207,646	Sept. 3, 1878	66	19	14	357
Faucet	J. G. Schmidt	204,847	June 11, 1878	446	180	13	1074
Faucet	W. D. Seal	201,634	Mar. 26, 1878	866	263	13	558
Faucet	J. O. Waddell	200,416	Feb. 19, 1878	546	161	13	363
Faucet	E. West	203,513	May 7, 1878	289	83	13	880
Faucet and bushing	A. Connelly	209,380	Oct. 29, 1878	1025	298	14	646



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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Faucet and cock.	R. F. Gillin.	207, 961	Sept. 10, 1878	407	123	14	404
Faucet attachment to casks and barrels.	H. Müller.	205, 123	June 18, 1878	742	221	13	1118
Faucet, Beer.	J. Rowe, Jr., and J. S. Knight.	210, 880	Dec. 17, 1878	550	154	14	912
Faucet, Bung.	S. T. Moore.	202, 855	Apr. 23, 1878	1090	812	13	761
Faucet for beer-barrels, Cooling.	C. C. Redmond.	208, 335	Sept. 24, 1878	828	242	14	466
Faucet for beer-fermenting vessels, Hose-coupling.	J. M. Pfaudler.	210, 209	Nov. 26, 1878	754	224	14	793
Faucet for compartment-vessels.	J. Butcher.	205, 350	June 25, 1878	1001	296	13	1156
Faucet-lock.	F. C. Lillis.	201, 430	Mar. 19, 1878	643	196	13	522
Faucet-lock.	M. F. Seward.	204, 624	June 4, 1878	202	65	13	1041
Faucet, Measuring.	W. J. Lane.	203, 627	May 14, 1878	421	120	13	886
Faucet, Measuring.	F. X. Rousseau.	205, 302	June 25, 1878	945	281	13	1149
Faucet, Measuring.	R. W. Tavener.	206, 151	July 16, 1878	768	220	14	114
Faucet, Measuring and indicating.	A. J. Johnson and C. O. Evarts.	201, 533	Mar. 19, 1878	745	227	13	537
Faucet, Registering liquor.	W. Williams.	208, 445	Sept. 24, 1878	942	276 277	14	480
Faucet, Self-measuring.	E. L. Spencer.	208, 645	Oct. 1, 1878	194	56	14	515
Faucet, Vent.	F. C. Lillis and L. A. Rebasz.	203, 866	Mar. 5, 1878	52	18	13	423
Feather-renovator.	C. G. Barnd.	208, 558	Oct. 1, 1878	100	30	14	503
Feather-renovator.	J. J. Bonney.	199, 614	Jan. 29, 1878	955	278	13	181
Feather-renovator.	J. M. Clark.	209, 230	Oct. 22, 1878	863	250	14	620
Feather-renovator.	E. H. Cowles.	201, 871	Apr. 2, 1878	13	4	13	600
Feather-renovator.	G. H. Crum.	208, 673	Oct. 8, 1878	232	66	14	528
Feather-renovator.	D. Eddy.	210, 768	Dec. 10, 1878	417	116	14	887
Feather-renovator.	C. Emmerich and W. Hamermiller.	205, 178	June 25, 1878	815	242	13	1132
Feather-renovator.	R. E. Gibbons and D. A. Ashmore.	207, 266	Aug. 20, 1878	646	192	14	294
Feather-renovator.	G. B. Griswold and J. C. Gipson.	199, 059	Jan. 8, 1878	347	101	13	70
Feather-renovator.	R. Hoover.	202, 030	Apr. 2, 1878	169	49	13	623
Feather-renovator.	A. K. Klock.	201, 686	Mar. 26, 1878	911	278	13	565
Feather-renovator.	D. B. Sanders.	210, 564	Dec. 3, 1878	191	51	14	848
Feather-renovator.	D. B. Sanders and J. Smith.	200, 411	Feb. 19, 1878	540	160	12	332
Feather-renovator.	B. Slater.	204, 769	June 11, 1878	359	107	13	1065
Feather-renovator.	W. A. Stewart.	199, 478	Jan. 22, 1878	787	231	13	147
Feather-renovator.	W. B. Taylor.	206, 644	July 30, 1878	1346	387	14	194
Feather-renovator, Steam.	A. Marble.	210, 263	Nov. 26, 1878	810	240	14	800
Feathers, Apparatus for bleaching.	A. Viol and C. P. Duflot.	202, 078	Apr. 2, 1878	218	.....	13	629
Feathers for bedding, Preparing.	A. Hicks.	200, 197	Feb. 12, 1878	314	94	13	290
Feathers, Machine for cutting down from.	C. Ballinger.	199, 175	Jan. 15, 1878	479	142	13	91
Feed-bag.	T. and J. Hawkes.	207, 658	Sept. 3, 1878	77	23	14	359
Feed-bag.	D. Jannopoulo.	205, 097	June 18, 1878	718	213	13	1114
Feed boiler, Stock.	C. R. Hardy.	201, 668	Mar. 26, 1878	896	273	13	562
Feed-cutter.	W. H. Ahrens.	205, 229	June 25, 1878	870	257	13	1139
Feed-cutter.	W. S. Bartle.	201, 732	Mar. 26, 1878	958	293	13	572
Feed-cutter.	L. Becker.	207, 479	Aug. 27, 1878	877	258	14	328
Feed-cutter.	A. Borneman and J. A. Shephard.	208, 786	Oct. 8, 1878	351	101	14	543
Feed-gage.	S. P. Halleck.	204, 967	June 18, 1878	592	173	13	1097
Feed-water for boilers, Purifying.	E. Bohlig.	206, 161	July 23, 1878	797	.....	14	121
Feed-water heater.	W. Baragwanath.	209, 105	Oct. 22, 1878	732	212	14	603
Feed-water heater.	H. G. Cady.	201, 649	Mar. 26, 1878	882	268	13	560
Feed-water heater.	W. Dawson.	204, 953	June 18, 1878	578	169	12	1095
Feed-water heater.	S. A. Goodwin.	210, 934	Dec. 17, 1878	620	172	14	921
Feed-water heater.	E. Huber.	210, 536	Dec. 3, 1878	100	42	14	844
Feed-water heater.	J. J. Ralya.	206, 133	July 16, 1878	746	214	14	111
Feed-water heater.	G. H. Rheutan.	211, 051	Dec. 17, 1878	766	210	14	937
Feed-water heater.	J. C. Stead.	205, 813	July 9, 1878	395	113	14	63
Feed-water heater, &c.	G. H. Zschech.	208, 701	Oct. 8, 1878	263	75	14	532
Feed-water heater and circulator for steam-boilers.	J. C. Stead.	207, 779	Sept. 3, 1878	197	60	14	374
Feed-water heater and circulator for steam-boilers.	J. C. Stead.	207, 780	Sept. 3, 1878	198	61	14	374
Feed-water heater and condenser.	A. De Beaumont.	199, 038	Jan. 8, 1878	325	96	13	66
Feed-water heater and filter.	W. J. Austin.	207, 337	Aug. 27, 1878	729	219	14	311
Feed-water heater and purifier.	S. Hughes.	201, 181	Mar. 12, 1878	362	112 113	13	477
Feed-water heater for locomotives.	T. H. Irwin.	203, 158	Apr. 30, 1878	1407	410 411	13	806
Feed-water heater for locomotives.	E. Korting.	205, 963	July 16, 1878	566	162	14	89
Feed-water heater for locomotives.	J. E. Wooten.	203, 518	May 7, 1878	294	84	13	861
Feed-water heater for steam-boilers.	B. Ford.	210, 846	Dec. 17, 1878	508	143 144	14	907
Feed-water regulator.	J. S. Badia.	205, 782	July 9, 1878	359	104	14	58
Feed-water regulator.	G. Dinkel and F. Rochow.	210, 843	Dec. 17, 1878	505	142	14	907
Feed-water regulator.	H. S. Maxim.	204, 747	June 11, 1878	336	101	13	1062
Feed-water regulator.	C. Mendenhall.	200, 405	Feb. 19, 1878	535	158	13	331
Feed-water to boilers, Device for supplying.	S. M. Fulton.	202, 535	Apr. 16, 1878	732	212	13	708
Feeding device, Automatic animal.	E. Sterzing.	199, 872	Jan. 29, 1878	1202	353	13	219
Feeding device, Stock.	J. L. Carpenter.	209, 225	Oct. 22, 1878	858	249	14	620
Feeding device, Stock.	O. J. Smith.	208, 544	Oct. 1, 1878	88	25, 26	14	501
Felly for vehicle-wheels.	A. Beck and T. Warwick.	209, 216	Oct. 22, 1878	850	246	14	619
Felly-joint.	J. Hutton.	206, 455	July 30, 1878	1148	329	14	170
Felly-joint and tightener.	S. R. Owen and F. M. Mahan.	206, 125	July 16, 1878	738	212	14	110
Felly-joint holder.	C. Adams.	208, 218	Sept. 24, 1878	701	207	14	451
Felt fabrics, Manufacture of ornamental.	P. A. Dailey.	199, 270	Jan. 15, 1878	574	167	13	105
Felt foot-coverings, &c., Manufacture of.	A. A. and R. B. Hawley.	203, 148	Apr. 30, 1878	1394	407	13	805
Felting-machine.	H. G. Ellsworth.	210, 413	Dec. 3, 1878	26	5	14	827
Felting-machine.	W. Keenan.	208, 180	Sept. 17, 1878	651	191	14	441
Felting-machine for making felted and napped fabrics.	G. B. Field.	202, 252	Apr. 9, 1878	418	122	13	662
Felting or hardening hollow articles of wool, Mechanism for.	A. A. and R. B. Hawley.	203, 147	Apr. 30, 1878	1393	407	13	805
Felting process.	H. W. Flagg and G. Jackson.	202, 805	Apr. 23, 1878	1038	.....	13	755
Fence.	O. A. Clark.	205, 245	June 25, 1878	888	263	13	1142
Fence.	S. Craig.	205, 358	June 25, 1878	1010	299	13	1157
Fence.	J. Davis and C. Beermann.	210, 757	Dec. 10, 1878	404	111	14	884
Fence.	E. Densmore.	200, 645	Feb. 26, 1878	792	233	13	378
Fence.	J. C. Drake.	200, 132	Feb. 12, 1878	249	76	13	280
Fence.	J. B. Fisher.	203, 536	May 14, 1878	336	96	13	875
Fence.	E. Hallett.	199, 642	Jan. 29, 1878	987	287	13	186
Fence.	J. Hallner.	205, 351	June 25, 1878	1032	306	13	1160



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Fence	H. Hardick	210,254	Nov. 26, 1878	801	237	14	759
Fence	J. Hart	209,680	Nov. 5, 1878	157	46	14	702
Fence	P. Hayden	207,518	Aug. 27, 1878	922	271	14	334
Fence	W. Hyatt	120,423	Dec. 3, 1878	35	8	14	828
Fence	J. N. Kerr	202,049	Apr. 30, 1878	1199	346	13	778
Fence	K. McKinnon	207,537	Aug. 27, 1878	944	277	14	357
Fence	W. M. Landreth	202,836	Apr. 23, 1878	1072	306	13	758
Fence	P. Lane	209,902	Nov. 12, 1878	396	118	14	728
Fence	J. S. Lenox	208,745	Oct. 8, 1877	309	89	14	537
Fence	J. D. and W. E. Mandeville	207,050	Aug. 13, 1878	407	126	14	269
Fence	C. H. Phelps	202,752	Apr. 23, 1878	980	282	13	747
Fence	J. B. Robertson	207,550	Aug. 27, 1878	959	281	14	359
Fence	C. A. Root	200,222	Feb. 12, 1878	535	101	13	293
Fence	J. A. Tornwall	211,067	Dec. 17, 1878	783	215	14	940
Fence	N. Westcott	202,905	Apr. 23, 1878	1144	328	13	767
Fence	W. R. White	202,686	Apr. 23, 1878	914	261	13	738
Fence	J. Williams	209,095	Oct. 15, 1878	709	205	14	595
Fence	E. D. Youngs	206,993	Aug. 13, 1878	354	108	14	254
Fence	A. Zimmerman	203,099	Apr. 30, 1878	1339	390	13	797
Fence	M. S. Zimmerman	202,503	Apr. 16, 1878	681	200	13	704
Fence-barb	L. T. Larson	200,783	Feb. 26, 1878	931	274	13	390
Fence-barb	H. Reynolds	203,779	May 14, 1878	584	163	13	900
Fence-barb and staple	P. Miles	208,688	Oct. 8, 1878	252	72	14	590
Fence-barb, Metal	J. McNeill	100,162	Jan. 15, 1878	468	138	13	89
Fence-barb, Rail	C. P. Housum	204,735	June 11, 1878	324	98	13	1061
Fence-barb, Wire	C. H. Baker and F. L. Bestor	208,140	Sept. 17, 1878	607	179	14	435
Fence-barb, Wire	J. W. Nadelhoffer	208,889	Apr. 2, 1878	31	9	13	603
Fence-barb, Wire	H. B. Scutt	205,000	June 18, 1878	624	183	13	1101
Fence, Barbed	J. Hallner	199,538	Jan. 22, 1878	854	250	13	157
Fence, Barbed	E. Havenhill	205,639	July 2, 1878	179	54	14	32
Fence, Barbed	H. M. Underwood	206,754	Aug. 6, 1878	97	31	14	219
Fence, Barbed	W. Warden	199,947	Feb. 5, 1878	59	19	13	242
Fence, Barbed-wire	M. Daley	209,467	Oct. 29, 1878	1112	324	14	659
Fence, Barbed-wire	A. J. Upham	205,702	July 2, 1878	256	76	14	41
Fence-cables, Wire-holder for making	C. K. Sawyer	209,520	Oct. 29, 1878	1173	340	14	668
Fence, Flood	A. F. Ferrell	209,537	Oct. 29, 1878	1192	346	14	670
Fence, Flood	H. D. Merrill	208,255	Sept. 24, 1878	745	218	14	456
Fence-gate	H. H. Allen	209,151	Oct. 22, 1878	787	228	14	610
Fence, Iron	G. R. Clark and F. Lothrop	206,538	July 30, 1878	1233	354	14	180
Fence, Iron	F. O. Hanson	210,526	Dec. 3, 1878	147	38	14	842
Fence, Iron	H. L. Jones	201,616	Mar. 26, 1878	848	257	13	555
Fence, Iron	J. Kinney	199,651	Jan. 29, 1878	968	290	13	187
Fence, Iron	F. R. Martin	204,236	May 28, 1878	1102	315	13	982
Fence, Iron	J. H. Van Dorn	208,699	Oct. 8, 1878	261	74, 75	14	531
Fence, Iron	J. H. Van Dorn	210,825	Dec. 10, 1878	475	134	14	894
Fence, Iron	J. H. Van Dorn	210,826	Dec. 10, 1878	475	134	14	894
Fence material, Barbed	L. F. Betts	199,018	Jan. 8, 1878	308	90	13	64
Fence, Metallic	C. L. Frink	210,247	Nov. 26, 1878	793	235	14	798
Fence, Metallic	J. Young	205,584	July 23, 1878	1056	303	14	154
Fence, Picket	C. H. Terry and W. W. Green, jr.	209,089	Oct. 15, 1878	701	203	14	563
Fence, Plashed	D. M. Kirkbride and M. Neil	208,742	Oct. 8, 1878	307	88	14	537
Fence, Plashed	M. Neil and W. Young	208,755	Oct. 8, 1878	323	92	14	539
Fence, Plashed	M. Neil and W. Young	208,756	Oct. 8, 1878	324	92	14	539
Fence, Plashed	M. Neil and W. Young	208,757	Oct. 8, 1878	324	92	14	539
Fence, Portable	S. Bryan	205,047	June 18, 1878	670	196	13	1108
Fence, Portable	H. and J. Harrington	202,722	Apr. 23, 1878	947	271	13	742
Fence, Portable	A. G. Kirk	199,211	Jan. 15, 1878	516	151	13	96
Fence, Portable	D. R. Leach	203,628	May 14, 1878	422	121	13	886
Fence, Portable	W. McLaughlin	208,027	Sept. 17, 1878	490	146	14	419
Fence-post	O. Allen	204,275	May 28, 1878	1136	325	13	987
Fence, &c., post	A. P. Bows	206,078	July 16, 1878	680	197	14	104
Fence-post	O. E. Butler	201,744	Mar. 26, 1878	969	296	13	574
Fence-post	B. Calkins	204,948	June 18, 1878	574	168	13	1035
Fence-post	W. E. Canedy and E. E. Leach	203,003	May 21, 1878	836	239	13	945
Fence-post	F. Dyer and G. Adair	201,170	Mar. 12, 1878	352	108	13	475
Fence-post	A. G. Garver	200,276	Feb. 12, 1878	394	116	13	302
Fence-post	J. M. Hartley and J. F. Dickens	204,565	June 4, 1878	133	45	13	1031
Fence-post	A. B. Hawson and W. H. Burnham	205,383	June 25, 1878	1035	307	13	1160
Fence-post	D. C. Johnson	201,422	Mar. 19, 1878	634	193	13	521
Fence-post	S. N. Lennon	202,179	Apr. 9, 1878	346	101	13	652
Fence-post	D. K. Mabie	201,541	Mar. 19, 1878	753	229	13	538
Fence-post	W. McMillan	204,909	June 18, 1878	533	155	13	1090
Fence-post	R. W. McFerriss	202,040	Apr. 2, 1878	181	53	13	624
Fence-post	J. H. Mudgett	200,217	Feb. 12, 1878	331	99	13	292
Fence-post	H. A. Pierce	204,246	May 28, 1878	1112	317	13	984
Fence-post	J. D. Romaine	205,685	July 2, 1878	238	71	14	39
Fence-post	E. D. Roseman	202,675	Apr. 23, 1878	1114	320	13	764
Fence-post	W. H. Roundy	201,951	Apr. 2, 1878	87	25	13	361
Fence-post	E. S. Sanford	207,685	Sept. 3, 1878	106	30	14	715
Fence-post	H. H. Sherwood	202,594	Apr. 16, 1878	797	229	13	537
Fence-post	G. J. Shoemaker	206,624	July 30, 1878	1322	380	14	191
Fence-post	J. Sickles	200,153	Feb. 12, 1878	270	80	13	283
Fence-post	A. B. Smith	204,771	June 11, 1878	360	108	13	1065
Fence-post	J. F. Snyder	208,860	Oct. 8, 1878	439	127	14	555
Fence-post	A. B. Sprout	200,946	Mar. 5, 1878	123	41	13	454
Fence-post	E. Stanley	209,303	Oct. 22, 1878	934	272	14	630
Fence-post	L. Turner	210,648	Dec. 10, 1878	293	80	14	870
Fence-post	E. S. Webster	203,804	May 14, 1878	610	170	13	908
Fence-post	W. H. Whittier	210,283	Nov. 26, 1878	833	245	14	803
Fence-post	J. W. Yarbrough	205,459	June 25, 1878	1105	327	13	1170
Fence-post	W. H. H. Youngs	199,949	Feb. 5, 1878	61	20	13	242
Fence-post and fence	G. R. Clark and F. Lothrop	207,254	Aug. 20, 1878	635	189	14	292
Fence-post, Iron	A. W. Comstock and R. A. Wallace	208,795	Oct. 8, 1878	366	104	14	545
Fence-post, Iron	S. Heaton	209,681	Nov. 5, 1878	158	46	14	702

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Fence-post, Metal	H. L. Gockley	199, 971	Feb. 5, 1878	80	26	13	245
Fence-post, Metallic	W. Langham	200, 266	Feb. 12, 1878	322	96	13	291
Fence-post, Metallic	E. C. McVitty	201, 547	Mar. 19, 1878	760	231	13	539
Fence-post, Metallic	S. Miller	203, 753	May 14, 1878	555	157	13	902
Fence-post socket	D. A. Hayt	199, 064	Jan. 8, 1878	351	103	13	71
Fence-tightener, Wire	E. C. Sears	202, 058	Apr. 2, 1878	197	57	13	627
Fence, Water-bed	J. F. Below	201, 983	Apr. 2, 1878	121	35	13	616
Fence, Water-bed	F. Feike	202, 428	Apr. 16, 1878	615	180	13	694
Fence, Water-bed	J. B. Mynatt	202, 572	Apr. 16, 1878	773	223	13	713
Fence-wire	T. V. Allis	205, 029	June 18, 1878	651	192	13	1165
Fence, Wire	W. H. H. Frye	204, 312	May 28, 1878	1176	335	13	922
Fence, Wire	M. Kelly	208, 399	Sept. 24, 1878	891	260	14	474
Fence, Wire	W. C. Payne	203, 938	May 21, 1878	759	219	13	936
Fence, Wire	W. Warden	159, 946	Feb. 5, 1878	58	19	13	242
Fence-wire barb	C. Brunner and H. Reynolds	203, 125	Feb. 12, 1878	244	74	13	279
Fence-wire barb	S. H. St. John	199, 330	Jan. 15, 1878	634	184	13	115
Fence-wire, Barbed	F. Billings	205, 254	June 25, 1878	877	259	13	1140
Fence-wire, Barbed	J. Brotherton	207, 710	Sept. 3, 1878	127	39	14	365
Fence-wire, Barbed	T. H. Dodge	201, 507	Mar. 19, 1878	718	218	13	534
Fence-wire, Barbed	O. O. Kittleson	203, 349	May 7, 1878	117	34	13	836
Fence-wire, Barbed	M. P. Mitchell	199, 924	Feb. 5, 1878	37	12	13	238
Fence-wire, Barbed	T. G. Orwig	208, 850	Apr. 2, 1878	31	9	13	603
Fence-wire, Barbed	O. Pederson	205, 501	July 2, 1878	38	12	14	14
Fence-wire, Barbed	A. L. Pitney	208, 538	Oct. 1, 1878	83	24	14	500
Fence-wire, Barbed	S. H. and J. M. St. John	205, 697	July 2, 1878	251	75	14	40
Fence-wire, Barbed	K. Tysdal	208, 001	Sept. 10, 1878	448	135	14	409
Fence-wire, Barbed	C. F. Washburn	200, 494	Feb. 19, 1878	621	183	13	344
Fence-wire fastener	R. W. Hargrave	204, 818	June 11, 1878	414	121	13	1071
Fence-wire retainer	W. P. C. Bain	199, 490	Jan. 22, 1878	797	234	13	148
Fence-wire stretcher	C. S. Davis	200, 377	Feb. 19, 1878	510	150	13	327
Fence-wires, Tool for stretching	A. Green	199, 004	Feb. 5, 1878	14	4	13	235
Fences, Device for holding and driving barbs into	C. P. Housum	204, 734	June 11, 1878	323	98	13	1061
Fences, Machine for making barbed ropes for wire	H. B. Scutt	200, 623	July 30, 1878	1321	380	14	191
Fences, Metal post for wire	C. N. Rand	202, 468	Apr. 10, 1878	653	191	13	699
Fences, Support or picket for strengthening	F. L. Sarmiento	203, 502	May 7, 1878	277	79	13	859
Fencing-strip	T. V. Allis	200, 790	Nov. 12, 1878	285	85	14	723
Fender:							
<i>See</i> Car-fender.	Sheet-metal fender.						
Grate-fender.							
Fender	R. Austin and W. H. Gardiner	205, 463	July 2, 1878	2	1	14	9
Fender	J. S. Lester	207, 362	Aug. 27, 1878	756	226	14	314
Fender-bar	H. Adler	205, 821	July 9, 1878	404	116	14	64
Fermenting-vessels, Apparatus for regulating the pressure in a series of	J. M. Pfaudler	205, 572	July 2, 1878	118	34	14	24
Ferrule for spading-forks	W. H. Buckley	207, 009	Aug. 13, 1878	371	114	14	256
Fertilizer	T. J. Boykin and J. W. Carmer	206, 077	July 16, 1878	680	194	14	104
Fertilizer	A. F. Crowell	208, 224	Sept. 24, 1878	708	208	14	452
Fertilizer	F. C. Grange	200, 189	Feb. 12, 1878	307	91	13	289
Fertilizer	A. Priz	209, 980	Nov. 19, 1878	495	144	14	754
Fertilizer	C. Richardson	208, 540	Oct. 1, 1878	84	24	14	500
Fertilizer and grain distributor	S. S. Morton	207, 062	Aug. 13, 1878	420	130	14	262
Fertilizer-distributor	W. M. Boon	199, 022	Jan. 8, 1878	311	92	13	64
Fertilizer-distributor	B. Kuhms	207, 043	Aug. 13, 1878	401	125	14	260
Fertilizer-distributor	A. McKenney	200, 324	Feb. 12, 1878	447	132	13	309
Fertilizer-distributor	J. H. B. Rea	208, 848	Oct. 8, 1878	427	124	14	553
Fertilizer-distributor	H. P. Underhill	200, 490	Feb. 19, 1878	617	182	13	344
Fertilizer-distributor	J. W. Wheatley	202, 081	Apr. 2, 1878	221	64, 65	13	630
Fertilizer-dropper	J. C. Moltrip	200, 837	Mar. 5, 1878	24	8	13	418
Fertilizers, Treatment of offal for	E. P. Baugh	209, 445	Oct. 29, 1878	1090	317	14	656
Fiber and pine-leaves for mattress-fillings, &c., Preparing palmetto.	W. G. Benedict	205, 035	June 18, 1878	656	194	13	1106
Fiber-cleaning machine	G. D. Luce	204, 906	June 18, 1878	530	155	13	1089
Fiber for use in the arts, Treating palmetto	G. F. Miller and W. G. Benedict	203, 177	Apr. 30, 1878	1427	380	13	809
Fiber-machine	G. Sanford	205, 911	July 9, 1878	499	142	14	76
Fiber, Machine for making	L. P. Summers	202, 766	Apr. 23, 1878	994	286	13	749
Fiber, Separating animal from vegetable	G. M. 2d and A. L. Rice	205, 139	June 18, 1878	761	218	13	1120
Fiber, Separating animal from vegetable	J. Wilkins	203, 230	Apr. 30, 1878	1480	433	13	815
Fiber, Separating animal from vegetable	J. Wilkins	203, 231	Apr. 30, 1878	1480	433	13	815
Fiber, Treatment of waste from the separation of animal from vegetable.	J. Wilkins	202, 910	Apr. 23, 1878	1148	286	13	768
Field-roller	T. B. Rice, jr.	204, 376	May 28, 1878	1244	354	13	1001
Field-roller and planter, Combined	J. J. Reicherts and D. Tipton	210, 962	Dec. 17, 1878	649	180	14	924
Fifth-wheel	J. Kritch	205, 279	June 25, 1878	918	272	13	1146
Fifth-wheel	L. G. Share	207, 213	Aug. 20, 1878	589	177	14	287
Fifth-wheel, Carriage	W. W. Grier	200, 712	Feb. 26, 1878	867	254	13	389
Fifth-wheel coupling	W. Lehmann	210, 789	Dec. 10, 1878	438	122	14	889
Fifth-wheel, Vehicle	S. S. Claar	210, 009	Nov. 19, 1878	529	159	14	759
Fifth-wheel, Vehicle	P. Deeble	210, 675	Dec. 10, 1878	322	88	14	874
Fifth-wheel, Vehicle	P. Okerlund	198, 809	Jan. 1, 1878	91	25	13	22
Fifth-wheel, Vehicle	M. Powe	202, 190	Apr. 9, 1878	356	104	13	653
File	W. Millsbaugh	210, 799	Dec. 10, 1878	449	126	14	891
File, Bill	W. C. Bussey	198, 968	Jan. 8, 1878	259	74	13	56
File, Bill	J. E. Gorman	201, 004	Mar. 5, 1878	183	58	13	443
File, Bill	T. Lees	202, 732	Apr. 23, 1878	955	274	13	744
File, Bill	S. Thompson	200, 675	Feb. 26, 1878	824	243	13	383
File, Bill	J. H. Waite	205, 704	July 2, 1878	258	77	14	41
File, Bill and letter	T. Orton	207, 817	Sept. 10, 1878	247	77, 78	14	383
File, Bill and paper	H. Baldwin	207, 477	Aug. 27, 1878	875	258	14	328
File-cleaner	W. T. Nicholson	200, 218	Feb. 12, 1878	331	100	13	293
File-cutting machine	C. F. Mudge and G. Whittaker	203, 065	Apr. 30, 1878	1307	380	13	793
File-cutting machine	A. Weed	209, 531	Oct. 29, 1878	1182	343	14	669
File-guard	M. P. Ayers	205, 519	July 2, 1878	59	17	14	16
File-handle	W. T. Nicholson	198, 777	Jan. 1, 1878	60	15	13	16
File-holder	R. Hudson	207, 967	Sept. 10, 1878	412	124	14	404
File-holder	W. T. Nicholson	204, 596	June 4, 1878	169	54	13	1037
File, Letter	W. A. Amberg	199, 395	Jan. 22, 1878	710	209	13	134

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File, Newspaper.....	D. H. King.....	204, 233	May 28, 1878	1099	814	13	982
File, Newspaper.....	H. S. Williams.....	199, 606	Jan. 22, 1878	923	270	13	168
File, Paper.....	A. Childs.....	208, 568	Oct. 1, 1878	118	34	14	505
File, Postal-card.....	A. Wiel.....	201, 077	Mar. 5, 1878	255	80	13	453
Files, Sharpening.....	M. A. Richardson.....	199, 573	Jan. 22, 1878	886	...	13	163
Filing, Appliance for flat.....	E. M. Kimball.....	204, 493	June 4, 1878	70	24	13	1022
Filter.....	J. C. Banks.....	210, 081	Nov. 19, 1878	604	180	14	769
Filter.....	J. and R. Bean.....	208, 144	Sept. 17, 1878	610	180	14	435
Filter.....	H. C. Bull.....	209, 454	Oct. 29, 1878	1100	320	14	637
Filter.....	J. C. Fisher.....	201, 602	Mar. 26, 1878	834	253	13	553
Filter.....	J. W. Hughes.....	209, 617	Nov. 5, 1878	87	26	14	692
Filter.....	G. H. Moore.....	201, 354	Mar. 19, 1878	567	...	13	512
Filter and clarifier for tea, coffee, &c.....	H. C. Rice.....	201, 947	Apr. 2, 1878	84	24	13	611
Filter and irrigating nozzle.....	S. Dawson.....	205, 733	July 9, 1878	306	90	14	51
Filter-bags, Machine for washing.....	O. W. Donner.....	203, 714	May 14, 1878	514	146	13	897
Filter, Cistern.....	V. A. Gates.....	210, 113	Nov. 19, 1878	638	189	14	773
Filter, Drive-well-point.....	M. J. Eich.....	203, 900	May 21, 1878	720	206	13	991
Filter, Liquid.....	C. T. Haas.....	207, 515	Aug. 27, 1878	920	270	14	333
Filter, Rain-water.....	W. H. Thomas and T. H. Carter.....	203, 092	Apr. 30, 1878	1335	388	13	797
Filter, Reversible.....	E. C. Houghton.....	209, 809	Nov. 12, 1878	303	90	14	725
Filter, Water.....	J. Crawford.....	199, 519	Jan. 22, 1878	830	243	13	154
Filter, Water.....	J. M. Curtice.....	202, 000	Apr. 2, 1878	137	40	13	619
Filter, Water.....	P. P. Emory.....	206, 938	Aug. 13, 1878	303	92, 93	14	247
Filter, Water.....	H. J. Ennis.....	208, 579	Oct. 1, 1878	127	37	14	506
Filter, Water.....	J. Foley.....	200, 608	Feb. 26, 1878	755	231	13	373
Filter, Water.....	J. Foley.....	201, 102	Mar. 12, 1878	285	88	13	465
Filter, Water.....	J. Foley.....	201, 103	Mar. 12, 1878	286	89	13	466
Filter, Water.....	E. T. Rogers.....	202, 471	Apr. 16, 1878	655	192	13	700
Filter, Water.....	J. N. Stevens.....	203, 566	May 14, 1878	370	104	13	879
Filtering apparatus.....	L. A. Enzinger.....	209, 874	Nov. 12, 1878	370	111	14	734
Filtering apparatus.....	A. Van Haagen.....	200, 363	Feb. 12, 1878	487	143	13	316
Filtering, cooling, and water-forcing apparatus combined.....	J. Gainey.....	204, 663	June 4, 1878	247	77	13	1051
Filtering-frame.....	C. L. Holt.....	210, 534	Dec. 3, 1878	158	41	14	844
Filtration.....	C. Gerson.....	201, 516	Mar. 19, 1878	727	232	13	535
Finger-nail trimmer.....	J. H. Hollman.....	205, 088	June 18, 1878	711	211	13	1113
Finger-ring.....	W. B. Closson.....	203, 323	May 7, 1878	95	27	13	832
Finger-ring.....	W. Riker.....	202, 588	Apr. 16, 1878	789	228	13	715
Fire-alarm and signaling apparatus, Magneto-electric.....	A. S. Hickley.....	200, 723	Feb. 26, 1878	876	257	13	390
Fire-alarm, Automatic.....	J. M. De Célis.....	201, 167	Mar. 12, 1878	350	108	13	475
Fire-alarm indicators, Thermoscope for.....	A. Gerard.....	205, 538	July 2, 1878	79	22	14	19
Fire-alarm signal-box.....	R. N. Tooker.....	202, 891	Apr. 23, 1878	1129	325	13	706
Fire-alarm, Thermostatic and electrical.....	J. O. Fowler, jr.....	207, 510	Aug. 27, 1878	916	269	14	333
Fire-alarms, Thermostat for.....	G. S. Shute.....	207, 139	Aug. 20, 1878	513	155	14	277
Fire-alarms, Thermostat for electric.....	R. F. Bartel.....	209, 017	Feb. 5, 1878	121	40	13	252
Fire and burglar alarm.....	J. D. William.....	210, 386	Nov. 26, 1878	951	276	14	818
Fire-arm.....	A. S. Ballard.....	209, 444	Oct. 29, 1878	1089	317	14	656
Fire-arm.....	W. H. Bliss.....	202, 627	Apr. 23, 1878	848	244	13	731
Fire-arm.....	A. Henry and D. Fraser.....	201, 524	Mar. 10, 1878	734	224	13	536
Fire-arm.....	J. Royal.....	210, 968	Dec. 17, 1878	660	182	14	925
Fire-arm, Breech-loading.....	J. Aston.....	201, 216	Mar. 12, 1878	397	122	13	482
Fire-arm, Breech-loading.....	W. H. Baker.....	202, 397	Apr. 16, 1878	582	171	13	689
Fire-arm, Breech-loading.....	J. Blumel.....	210, 905	Dec. 17, 1878	591	163	14	917
Fire-arm, Breech-loading.....	H. Borchardt.....	206, 217	July 23, 1878	857	245	14	129
Fire-arm, Breech-loading.....	H. C. Bull.....	209, 010	Oct. 15, 1878	610	{ 177 178 }	14	581
Fire-arm, Breech-loading.....	J. D. Coon.....	208, 889	Oct. 15, 1878	478	{ 137 138 }	14	564
Fire-arm, Breech-loading.....	R. Fay.....	209, 613	Nov. 5, 1878	81	24	14	601
Fire-arm, Breech-loading.....	W. Field.....	200, 041	Feb. 5, 1878	149	48, 49	13	256
Fire-arm, Breech-loading.....	W. R. Finch.....	200, 042	Feb. 5, 1878	152	49, 50	13	257
Fire-arm, Breech-loading.....	G. H. Fox.....	198, 973	Jan. 8, 1878	265	76	13	87
Fire-arm, Breech-loading.....	C. E. and R. Green.....	208, 085	Sept. 17, 1878	544	{ 162 163 }	14	427
Fire-arm, Breech-loading.....	D. M. Lefever.....	205, 193	June 25, 1878	833	247	13	1134
Fire-arm, Breech-loading.....	P. Mauser.....	200, 322	Feb. 12, 1878	443	151	13	309
Fire-arm, Breech-loading.....	J. McAlpine.....	204, 675	June 11, 1878	258	80, 81	13	1052
Fire-arm, Breech-loading.....	F. J. Meslo.....	207, 056	Aug. 13, 1878	413	128	14	261
Fire-arm, Breech-loading.....	J. T. Morrison.....	206, 475	July 30, 1878	1167	335	14	172
Fire-arm, Breech-loading.....	E. L. Perry.....	210, 626	Dec. 10, 1878	270	73	14	868
Fire-arm, Breech-loading.....	J. C. Petmecky.....	210, 144	Nov. 19, 1878	671	199	14	778
Fire-arm, Breech-loading.....	J. Rupertus.....	209, 925	Nov. 12, 1878	420	126	14	741
Fire-arm, Breech-loading.....	J. D. Slate.....	204, 768	June 11, 1878	358	107	13	1065
Fire-arm, Breech-loading.....	C. W. Snider.....	202, 126	Apr. 9, 1878	287	84	13	644
Fire-arm, Breech-loading.....	W. Soper.....	207, 689	Sept. 3, 1878	104	31, 32	14	362
Fire-arm, Breech-loading.....	H. Updegraff.....	205, 447	June 25, 1878	1097	324	13	1103
Fire-arm, Breech-loading.....	A. C. Vredenburg.....	203, 799	May 14, 1878	604	169	13	908
Fire-arm, Breech-loading.....	J. M. Whittemore.....	201, 970	Apr. 2, 1878	106	31, 32	13	614
Fire-arm lock.....	W. H. Baker.....	199, 773	Jan. 29, 1878	1109	325	13	265
Fire-arm lock.....	A. T. De Mounce.....	202, 418	Apr. 16, 1878	603	177	13	692
Fire-arm lock.....	W. W. Dodge.....	210, 506	Dec. 3, 1878	120	32	14	839
Fire-arm lock.....	D. B. Wesson.....	202, 388	Apr. 16, 1878	573	168	13	688
Fire-arm lock.....	J. M. Wittman.....	206, 991	Aug. 13, 1878	351	108	14	253
Fire-arm, Magazine.....	A. Burgess.....	210, 091	Nov. 19, 1878	615	183	14	770
Fire-arm, Magazine.....	A. Burgess.....	210, 181	Nov. 26, 1878	725	215	14	789
Fire-arm, Magazine.....	A. Burgess.....	210, 294	Nov. 26, 1878	844	248	14	894
Fire-arm, Magazine.....	E. F. Edgecomb.....	205, 066	June 18, 1878	688	202	13	1110
Fire-arm, Magazine.....	G. F. Evans.....	207, 350	Aug. 27, 1878	746	223	14	313
Fire-arm, Magazine.....	J. H. Salter.....	208, 696	Oct. 8, 1878	259	74	14	531
Fire-arm, Magazine.....	F. W. Tiesing.....	204, 863	June 11, 1878	460	134	13	1076
Fire-arm, Magazine.....	F. W. Tiesing.....	206, 367	July 23, 1878	1037	{ 297 298 }	14	133
Fire-arm, Magazine.....	F. W. Tiesing.....	208, 128	Sept. 17, 1878	592	{ 175 176 }	14	433
Fire-arm, Magazine.....	W. Trabue.....	206, 279	July 23, 1878	930	263	14	139



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Fire-arm, Magazine.....	W. Trabue.....	207,782	Sept. 3, 1878	200	61	14	374
Fire-arm, Magazine.....	W. W. Wetmore.....	206,202	July 23, 1878	843	241	14	127
Fire-arm, Revolving.....	H. M. Erskine.....	207,168	Aug. 20, 1878	541	163	14	281
Fire-arm, Revolving.....	I. Johnson and M. Bye.....	204,438	June 4, 1878	25	8	13	1016
Fire-arm, Revolving.....	O. Jones.....	200,794	Feb. 26, 1878	941	{ 277 } 278	13	401
Fire-arm, Revolving.....	R. F. Joslyn.....	202,350	Apr. 16, 1878	538	158	13	683
Fire-arm, Revolving.....	B. F. Joslyn.....	202,351	Apr. 16, 1878	539	158	13	683
Fire-arm, Revolving.....	B. F. Joslyn.....	204,334	May 28, 1878	1201	342	13	905
Fire-arm, Revolving.....	B. F. Joslyn.....	204,335	May 28, 1878	1202	343	13	905
Fire-arm, Revolving.....	A. L. Sweet.....	210,725	Dec. 10, 1878	372	102	14	880
Fire-arm, Revolving.....	L. Ybarra.....	202,915	Apr. 23, 1878	1151	331	13	768
Fire-arms, Adjustable hammer for.....	E. A. F. Toepperwein.....	199,124	Jan. 8, 1878	416	122	13	80
Fire-arms and other articles of metal, Ornamentation of.....	O. Bodenstein.....	210,446	Dec. 3, 1878	60	15	14	832
Fire-arms, Extractor for revolving.....	O. Jones and F. W. Marston.....	198,745	Jan. 1, 1878	15	4	13	11
Fire-arms, Extractor for revolving.....	B. F. Joslyn.....	204,336	May 28, 1878	1203	343	13	906
Fire-arms, Extractor for revolving.....	B. F. Joslyn.....	204,337	May 28, 1878	1203	343	13	906
Fire-arms, Nipple-guard for.....	N. Fretz.....	200,999	Mar. 5, 1878	178	57	13	442
Fire-arms, Rear sight for.....	A. Roda.....	200,667	Feb. 26, 1878	817	240	13	362
Fire-arms, Reflector for attachment to.....	J. McGuigan.....	208,481	Oct. 1, 1878	28	9	14	492
Fire-arms, Registering attachment for.....	G. A. Badger.....	209,000	Nov. 5, 1878	67	19	14	689
Fire-arms, Sight for.....	A. Gipperich.....	210,115	Nov. 19, 1878	640	190	14	774
Fire-arms, Spade attachment for.....	J. P. White.....	210,282	Nov. 26, 1878	831	245	14	802
Fire-arms, Telescope attachment for.....	C. Slotterbek.....	208,765	Oct. 8, 1878	333	95	14	540
Fire-back.....	G. W. J. Woltz.....	198,960	Jan. 8, 1878	250	72	13	54
Fire-chamber, Plastic lining for.....	H. W. McKenzie.....	210,247	Nov. 26, 1878	903	161	14	812
Fire-engine.....	D. M. Cooper.....	207,165	Aug. 20, 1878	537	161	14	280
Fire engine and alarm, Electro-magnetic.....	L. G. Woolley.....	207,377	Aug. 27, 1878	769	{ 229 } 230	14	315
Fire-engine boiler, Steam.....	M. R. Clapp.....	204,885	June 18, 1878	508	148	13	1086
Fire-engine, Chemical.....	W. Morrison.....	205,756	July 9, 1878	330	96	14	54
Fire-engine hose, Carbonic-acid-generating attachment to.....	J. S. Islsey.....	199,436	Jan. 22, 1878	746	219	13	140
Fire-engine, Portable.....	W. T. Underwood.....	209,202	Oct. 22, 1878	839	242	14	617
Fire-engine, Steam.....	H. H. Hill and F. Moorlen.....	208,314	Sept. 24, 1878	806	235	14	463
Fire-engines, Chemical annexes for.....	J. H. and T. E. Connelly.....	208,375	Sept. 24, 1878	866	252	14	471
Fire-escape.....	J. J. Adgate.....	202,504	Apr. 16, 1878	682	200	13	704
Fire-escape.....	C. H. Ames.....	206,916	Aug. 13, 1878	284	86	14	245
Fire-escape.....	J. Amess.....	204,473	June 4, 1878	55	18	13	1020
Fire-escape.....	E. M. Ball.....	207,705	Sept. 3, 1878	122	38	14	365
Fire-escape.....	T. L. Bennett.....	203,527	May 14, 1878	324	91	13	873
Fire-escape.....	H. J. Bowman.....	200,600	Feb. 26, 1878	745	218	13	371
Fire-escape.....	J. Broughton.....	203,240	May 7, 1878	4	2	13	821
Fire-escape.....	C. and J. G. Brunner.....	199,026	Jan. 8, 1878	315	93	13	65
Fire-escape.....	F. G. Bryant.....	203,587	May 14, 1878	387	109	13	881
Fire-escape.....	E. L. Burnham.....	210,596	Dec. 10, 1878	235	64	14	863
Fire-escape.....	H. Burrows.....	198,928	Jan. 8, 1878	220	62	13	49
Fire-escape.....	T. F. Carpenter.....	200,694	Feb. 26, 1878	844	{ 248 } 249	13	386
Fire-escape.....	J. M. Chandler.....	199,028	Jan. 8, 1878	317	93	13	65
Fire-escape.....	F. A. Copeland and R. W. Taylor.....	206,087	July 10, 1878	689	199	14	105
Fire-escape.....	I. D. Cross.....	200,260	Feb. 12, 1878	377	111	13	299
Fire-escape.....	I. D. Cross.....	204,299	May 28, 1878	1165	332	13	990
Fire-escape.....	F. Dettmer.....	202,708	Apr. 23, 1878	935	267	13	741
Fire-escape.....	D. L. Dieckmann.....	205,949	July 16, 1878	550	{ 156 } 157	14	88
Fire-escape.....	W. Duryea.....	207,856	Sept. 10, 1878	292	89	14	389
Fire-escape.....	W. Duryea.....	210,928	Dec. 17, 1878	613	170	14	920
Fire-escape.....	M. C. S. Flanagan.....	208,729	Oct. 8, 1878	291	83	14	535
Fire-escape.....	G. W. Foster.....	200,526	Feb. 19, 1878	653	192	13	349
Fire-escape.....	F. B. Fuchs.....	208,470	Oct. 1, 1878	18	5	14	491
Fire-escape.....	W. B. Garoutte.....	200,387	Feb. 19, 1878	519	153	13	329
Fire-escape.....	C. Gates.....	209,555	Nov. 5, 1878	19	6	14	683
Fire-escape.....	E. K. Graves.....	200,190	Feb. 12, 1878	308	92	13	289
Fire-escape.....	W. A. Greene.....	199,199	Jan. 8, 1878	504	148	13	95
Fire-escape.....	C. Hinkle.....	206,787	Aug. 6, 1878	137	42	14	223
Fire-escape.....	D. F. Hunt.....	207,419	Aug. 27, 1878	817	241	14	321
Fire-escape.....	J. P. R. James.....	202,263	Apr. 9, 1878	428	125	13	663
Fire-escape.....	G. Juengst and C. Bernhard.....	209,971	Nov. 19, 1878	484	{ 146 } 147 148	14	753
Fire-escape.....	G. Kenyon.....	200,200	Feb. 12, 1878	318	95	13	290
Fire-escape.....	J. Kerr.....	210,539	Dec. 3, 1878	162	43	14	844
Fire-escape.....	T. H. Knight, O. H. Curtis, and G. C. Gibbs.....	204,581	June 4, 1878	152	50	13	1034
Fire-escape.....	J. G. Kurtz and T. J. Kister.....	204,583	June 4, 1878	154	51	13	1035
Fire-escape.....	J. M. Lescale.....	204,057	May 21, 1878	887	254	13	952
Fire-escape.....	E. Lumpert.....	199,078	Jan. 8, 1878	364	108	13	73
Fire-escape.....	G. Martin.....	202,562	Apr. 16, 1878	763	220	13	712
Fire-escape.....	J. C. Moore.....	200,870	Mar. 5, 1878	57	20	13	423
Fire-escape.....	C. R. Mott.....	202,115	Apr. 9, 1878	274	81	13	642
Fire-escape.....	W. J. Nunn.....	199,461	Jan. 22, 1878	770	226	13	144
Fire-escape.....	A. Oschner.....	209,916	Nov. 12, 1878	410	123	14	740
Fire-escape.....	D. Ottinger.....	200,665	Feb. 26, 1878	815	240	13	382
Fire-escape.....	D. Ottinger.....	209,773	Nov. 12, 1878	267	79	14	721
Fire-escape.....	W. C. Phillips.....	202,460	Apr. 16, 1878	645	188	13	698
Fire-escape.....	F. A. Presko.....	199,571	Jan. 22, 1878	883	250	13	102
Fire-escape.....	C. Richards.....	199,934	Feb. 5, 1878	46	15	13	240
Fire-escape.....	J. G. Richardson.....	200,844	Mar. 5, 1878	31	11	13	419
Fire-escape.....	S. Root.....	201,050	Mar. 5, 1878	231	73	13	450
Fire-escape.....	E. H. Rotschka and O. F. Davis.....	209,137	Oct. 22, 1878	772	224	14	608
Fire-escape.....	E. Row.....	205,579	July 2, 1878	123	37	14	25
Fire-escape.....	N. Schroeder.....	200,878	Mar. 5, 1878	64	22	13	425
Fire-escape.....	J. S. Shaw.....	203,077	Apr. 30, 1878	1321	884	13	795

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Fire-escape	C. A. Sheldon	201,455	Mar. 19, 1878	666	203	13	536
Fire-escape	H. Stacey	201,896	Apr. 2, 1878	38	10	13	604
Fire-escape	J. Stengel	201,567	Mar. 19, 1878	782	238	13	542
Fire-escape	D. O. Striffler	205,511	July 2, 1878	49	15	14	15
Fire-escape	J. Swank and A. Jehuke	202,767	Apr. 23, 1878	995	286	13	749
Fire-escape	J. E. Wildbore	203,687	May 14, 1878	485	137	13	853
Fire-escape	V. Wohlmann	208,944	Oct. 15, 1878	539	158	14	572
Fire-escape	A. Ziegenhagen	200,370	Feb. 12, 1878	495	145	13	317
Fire-escape and spring bed-bottom combined	J. G. King	198,848	Jan. 1, 1878	126	36	13	28
Fire-escape and spring-bed, Combined	R. H. McGinnis and C. T. Maus	206,811	Aug. 6, 1878	156	49	14	226
Fire-escape ladder	W. W. Clark, B. A. and S. Bowman	203,119	Apr. 30, 1878	1360	356	13	800
Fire-escape ladder	S. Davis	204,952	June 18, 1878	577	169	13	1095
Fire-escape ladder	J. J. Lucas	204,059	May 21, 1878	889	255	13	955
Fire-escape ladder	J. P. Morris	202,364	Apr. 16, 1878	551	161	13	682
Fire-escape ladder	R. W. Winters	203,517	May 7, 1878	293	84	13	861
Fire-extinguisher	E. L. Abbott and J. C. Birdsall	199,171	Jan. 15, 1878	475	140	13	90
Fire-extinguisher	T. E. Connelly	200,690	Feb. 26, 1878	850	250	13	387
Fire-extinguisher	T. F. Gilliland	200,826	Mar. 5, 1878	11	4	13	417
Fire-extinguisher	J. C. Lester and C. J. Fox	201,183	Mar. 12, 1878	365	113	13	477
Fire-extinguisher	H. S. Parmelee	205,672	July 2, 1878	222	66	14	37
Fire-extinguisher	J. W. Stanton	202,068	Apr. 2, 1878	207	60, 61	13	628
Fire-extinguisher	J. W. Sutton	200,724	Nov. 5, 1878	204	60, 61	14	708
Fire-extinguisher	F. C. Zappie	199,950	Feb. 5, 1878	61		13	242
Fire-extinguisher and escape-tower	A. C. Ellithorpe and C. Haas	202,069	Apr. 2, 1878	145	42	13	620
Fire-extinguisher, Automatic	F. Leclerc	202,035	Apr. 2, 1878	174	51	13	624
Fire-extinguisher, Automatic	J. A. Miller, jr.	209,910	Nov. 12, 1878	403	121	14	789
Fire-extinguisher for car-stoves	P. P. Quackenboss	208,200	Sept. 17, 1878	606	196	14	443
Fire-extinguisher for lint-rooms	Z. N. Morrell	204,840	June 11, 1878	441	129	13	1074
Fire-extinguisher for oil tanks, Automatic chemical	J. H. and T. E. Connelly	208,374	Sept. 24, 1878	865	252	14	471
Fire-extinguishing apparatus	J. E. Condit and A. J. Doty	209,600	Nov. 5, 1878	137	40	14	699
Fire-extinguishing apparatus	R. K. Evans	209,242	Oct. 22, 1878	873	253	14	622
Fire-extinguishing apparatus	J. W. Stanton	202,067	Apr. 2, 1878	205	60	13	628
Fire-extinguishing apparatus	J. W. Stanton	203,564	May 14, 1878	308	104	13	879
Fire-front	J. A. Eving	202,799	Apr. 23, 1878	1026	294	13	753
Fire in oil-tanks, &c., Device for extinguishing	J. H. and T. E. Connelly	204,887	June 18, 1878	511	149	13	1087
Fire-kindler	J. Beard	199,685	Jan. 29, 1878	1028	299	13	192
Fire-kindler	T. M. Benner	208,882	Oct. 15, 1878	470		14	563
Fire-kindler	J. J. K. Boote and G. L. Hechler	200,972	Mar. 5, 1878	149	49	13	438
Fire-kindler	H. H. Case	199,184	Jan. 15, 1878	192	144	13	10
Fire-kindler	E. J. Fenn	203,535	May 14, 1878	335	95	13	875
Fire-kindler	F. S. Lewis	201,184	Mar. 12, 1878	365	113	13	477
Fire-kindler	E. J. Morris	209,069	Oct. 15, 1878	682	197	14	591
Fire-kindler	J. H. Prentice	201,045	Mar. 5, 1878	226	71	13	449
Fire-kindler	J. D. Walker	210,582	Dec. 3, 1878	213	56	14	851
Fire-kindler	H. N. Woodman	203,809	May 14, 1878	615	172	13	909
Fire-kindler, Automatic	J. B. Curtis	209,383	Oct. 29, 1878	1028	299	14	647
Fire-kindlers, Machine for making	J. P. Wagner	204,404	June 4, 1878	47	15	13	1019
Fire-kindling	T. Williamson and W. A. Vogts	199,245	Jan. 15, 1878	543		13	101
Fire-place	S. W. Dixon	202,419	Apr. 16, 1878	605	177	13	692
Fire-place	G. H. Hess	206,326	July 23, 1878	988	281	14	146
Fire-place	O. F. and O. C. Mehurin	201,886	Apr. 2, 1878	27	7	13	602
Fire-place	J. M. Yahres	203,522	May 7, 1878	299	85	13	861
Fire-place heater	J. R. Lancaster	210,862	Dec. 17, 1878	525	148	14	900
Fire-place heater	A. R. Morgan	210,870	Dec. 17, 1878	536	151	14	911
Fire-places, Hood for	H. Clayton	208,560	Oct. 1, 1878	119	34	14	545
Fire-pot and grate	J. W. Elliot	206,769	Aug. 6, 1878	53	17	14	213
Fire-pot or portable furnace	J. W. Fisher	200,523	Feb. 19, 1878	650	191	13	349
Fire-shovel	A. Bartell	203,991	May 21, 1878	819	235	13	943
Fire-shovel	S. Whitnum	210,732	Dec. 10, 1878	378	103	14	881
Fire-tube boiler	T. Boehmer and H. E. Olbrich	201,988	Apr. 2, 1878	126	37	13	617
Fires, Method of and apparatus for extinguishing	W. A. Graham	205,942	July 9, 1878	529	151	14	80
Fires, System for detecting and extinguishing	W. H. Johnstone	210,944	Dec. 17, 1878	631	175	14	922
Fish and animal trap	G. Davis	201,564	Mar. 19, 1878	712	217	13	533
Fish, Apparatus for catching	S. N. and E. A. Robertson	202,962	Apr. 30, 1878	1211	350	13	780
Fish, bait, and oyster can	R. J. Ronoy	204,168	May 28, 1878	1028	293	13	973
Fish-catching device	J. A. Mitchell	199,926	Feb. 5, 1878	39	13	13	228
Fish, Curing	S. W. Griffin	204,966	June 18, 1878	592		13	1067
Fish, Curing	L. Woodruff	204,647	June 4, 1878	221		13	1044
Fish-drain for casks	W. H. Ortlip	205,128	June 18, 1878	745	222	13	1115
Fish-drier	D. H. Tetu	207,913	Sept. 10, 1878	355	108	14	397
Fish-eggs, Apparatus for hatching	I. H. Wright	207,333	Aug. 20, 1878	709	212	14	863
Fish-guard for water-pipes	J. G. L. Boettcher	202,513	Apr. 16, 1878	692	203	13	705
Fish-hatching apparatus	T. B. Ferguson	199,527	Jan. 22, 1878	843	246	13	155
Fish-hook, Baited	J. Falvey	208,581	Oct. 1, 1878	130	38	14	566
Fish-trap	W. J. Clark and T. W. Roberts	204,538	June 4, 1878	107	36	13	1027
Fish-trap	D. S. McBryde	198,894	Jan. 1, 1878	174	50	13	86
Fishermen, Pocket-book for	F. M. Yerrinton	206,206	July 23, 1878	849	242	14	128
Fishing apparatus	O. Hesse	202,818	Apr. 23, 1878	1053	302	13	756
Fishing-rod	H. Van Altena	208,500	Oct. 1, 1878	46	15	14	485
Fishing-rod	J. A. Robertson	206,264	July 23, 1878	910	259	14	156
Fishing-rod joint	H. L. Leonard	207,665	Sept. 3, 1878	83	25	14	359
Fishing-rod tip	C. R. Fisher	198,879	Jan. 1, 1878	163	46	13	84
Fishway	D. Fisher	206,715	Aug. 6, 1878	59	19	14	214
Fishway	M. McDonald	208,408	Sept. 24, 1878	900	263	14	476
Flanging-machine	L. Campbell and J. F. Richards	201,325	Mar. 19, 1878	535	164	13	567
Flask: See Liquid-cooling flask. Molder's flask.							
Flat-iron	C. G. Gunderson	206,014	July 16, 1878	617	178	14	96
Flat-iron heater	J. A. J. Askew	201,215	Mar. 12, 1878	396	122	13	482
Flat-iron heater	N. Crotsenburg	208,075	Sept. 17, 1878	535	100	14	426
Flier for speeders and fly-frames	W. C. Macomber	200,321	Feb. 12, 1878	442	131	13	309
Flood-gate	D. Bowles	202,321	Apr. 9, 1878	387	113	13	658
Flood-gate	J. T. Simpson	205,812	July 9, 1878	395	113	14	63
Flood-gate	L. I. Wathen	209,529	Oct. 29, 1878	1181	342	14	699



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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Floor-cloth, Manufacture of	J. Robley	208,036	Sept. 17, 1878	500	.....	14	421
Floor, roof, pavement, &c., Composition	T. Hyatt	206,112	July 16, 1878	719	{ 207 208 }	14	108
Flooring-clamp	J. Schofield	201,709	Mar. 26, 1878	933	286	13	568
Flooring-jack	D. A. Ferris	209,390	Oct. 29, 1878	1034	300	14	648
Flooring, Laying	C. Mudge	202,187	Apr. 9, 1878	355	104	13	653
Flooring, Portable parquetry	A. Siemroth	207,990	Sept. 10, 1878	436	131	14	407
Flour and grain conveyer	F. Kruse	208,613	Oct. 1, 1878	156	46	14	510
Flour and meal chest with sifting attachment	C. Romine	201,557	Mar. 19, 1878	769	234	13	540
Flour, Apparatus for reducing semolino middlings or sharps to.	R. Frost	201,000	Mar. 5, 1878	179	57	13	442
Flour-bolt	M. C. Cogswell and W. H. Finn	205,476	July 2, 1878	12	4	14	10
Flour-bolt	F. Kruse	198,889	Jan. 1, 1878	171	48, 49	13	35
Flour-bolt	S. Lewis and F. A. Baker, jr.	210,865	Dec. 17, 1878	529	149	14	910
Flour-bolt	G. T. Richey	209,193	Oct. 22, 1878	830	{ 239 240 }	14	615
Flour-bolt	B. D. Sanders	208,268	Sept. 24, 1878	760	223	14	457
Flour-bolt	W. L. Teter	210,275	Nov. 26, 1878	824	243	14	802
Flour-bolt feeder, &c.	R. S. T. Russell	204,454	June 4, 1878	37	12	13	1018
Flour-bolting machine	M. P. Clemmer	210,186	Nov. 26, 1878	732	217	14	790
Flour-bolting machine	M. Martin	206,186	July 23, 1878	820	234	14	125
Flour-bolting machine	A. W. Schoenleben	207,448	Aug. 27, 1878	848	250	14	324
Flour chest, sifter, and safe combined	C. H. and R. H. Ober	201,195	Mar. 12, 1878	375	116	13	479
Flour-dressing machine	T. F. Greenleaf	207,176	Aug. 20, 1878	551	165	14	282
Flour, Manufacture of	C. S. Marple	200,621	Feb. 26, 1878	766	225	13	375
Flour, Manufacturing	S. M. Brua	209,795	Nov. 12, 1878	290	87	14	724
Flour, Manufacturing	R. L. Downton	204,302	May 28, 1878	1167	333	13	991
Flour, Manufacturing buckwheat	N. H. and A. G. Gilbert	210,517	Dec. 3, 1878	135	.....	14	841
Flour, Testing	E. Pekar	203,068	Apr. 30, 1878	1311	381	13	793
Flour, Treatment of	A. Hunter	203,544	May 14, 1878	343	98	13	876
Flower-pin	J. H. Plummer	209,191	Oct. 22, 1878	828	239	14	615
Flower-pot	J. A. Conway	209,798	Nov. 12, 1878	293	87	14	724
Flower-pots, Machine for making	J. Braslin	203,408	May 7, 1878	178	51	13	845
Flower-stand	E. Mets	201,813	Mar. 26, 1878	1038	317	13	584
Flower-stand	R. Murdoch	205,670	July 2, 1878	221	65, 66	14	37
Flue	H. R. Bash	201,484	Mar. 19, 1878	691	212	13	530
Flue-cap, Ventilating	J. D. McLinden	199,458	Jan. 22, 1878	769	225	13	144
Flue cleaner, Boiler	O. B. Kendall	199,650	Jan. 29, 1878	997	290	13	187
Flue cleaner, Boiler	F. I. Pearce	201,555	Mar. 19, 1878	768	234	13	540
Flue cleaner, Steam	R. Atherton	210,833	Dec. 17, 1878	489	138	14	905
Flue, Smoke	A. Heegaard	210,120	Nov. 19, 1878	645	191	14	774
Fluid-can	C. H. Nye	209,185	Oct. 22, 1878	823	238	14	615
Fluid-discharging apparatus	G. F. Fogarty	206,009	July 16, 1878	613	176	14	95
Fluid meter and motor, Rotary	E. Anthony	199,397	Jan. 22, 1878	712	210	13	135
Fluid-motor, Double-acting	D. G. Haskins	204,728	June 11, 1878	318	97	13	1060
Fluid-pressure regulator	J. F. Bennett	209,602	Nov. 5, 1878	70	20	14	690
Flume	R. H. Campbell	201,326	Mar. 19, 1878	537	165	13	508
Fluting and sad iron holder	N. R. Streeter	204,922	June 18, 1878	549	160	13	1091
Fluting device	J. and E. Shane and G. W. Hooker	202,069	Apr. 23, 1878	896	257	13	736
Fluting-iron	J. Neill	210,891	Dec. 10, 1878	451	127	14	891
Fluting-iron	N. R. Streeter	202,676	Apr. 23, 1878	902	259	13	737
Fluting-iron	F. H. Stumpf	203,214	Apr. 30, 1878	1465	428	13	813
Fluting-machine	F. M. Nixon	206,685	Aug. 6, 1878	32	9	14	210
Fluting-machine	C. G. Shepard and P. Adams, jr.	209,930	Nov. 12, 1878	429	129	14	742
Fluting-machine	C. G. Shepard and P. Adams, jr.	211,061	Dec. 17, 1878	778	213	14	939
Fly-trap	A. G. Babcock	205,464	July 2, 1878	2	1	14	9
Fly-trap	D. S. Kidder	204,053	May 21, 1878	883	253	13	951
Fly-trap	W. Smith	210,562	Dec. 3, 1878	188	50	14	848
Fly-traps, &c., Joining sheet-metal to wire-cloth for the construction of.	S. M. Cook	200,130	Feb. 12, 1878	248	75	13	280
Fly-wheel	J. W. Robertson	210,633	Dec. 10, 1878	277	75	14	869
Fly-wheel for engines	P. E. Jay	205,623	May 14, 1878	416	119	13	885
Flying-machine	C. F. Ritchel	201,200	Mar. 12, 1878	380	118	13	479
Fodder-cutter	G. Knoth	202,553	Apr. 16, 1878	756	218	13	711
Fog-horn	L. Smith and R. Booth	209,364	Oct. 29, 1878	1009	294	14	644
Fog-signal	S. C. Maine	203,473	May 7, 1878	250	72	13	855
Folding and tilting chair	D. E. Teal	208,864	Oct. 8, 1878	443	128	14	555
Folding boat, Portable	N. A. Osgood	200,664	Feb. 26, 1878	814	239	13	382
Folding bracket-chair	W. A. Brewster	199,024	Jan. 8, 1878	313	92	13	64
Folding chair	H. Closterman, jr.	204,423	June 4, 1878	8	3	13	1014
Folding chair	A. T. L. Davis	204,543	June 4, 1878	111	38	13	1028
Folding chair	R. Dick	210,842	Dec. 17, 1878	504	142	14	907
Folding chair	C. D. Hyde	200,456	Feb. 19, 1878	584	172	13	339
Folding chair	E. H. Mahoney	200,211	Feb. 12, 1878	325	98	13	292
Folding chair	E. G. Stanley	200,100	Feb. 5, 1878	210	66	13	266
Folding chair	E. Tucker	205,016	June 18, 1878	637	187	13	1103
Folding chair	J. E. Wakefield	200,953	Mar. 5, 1878	129	42	13	435
Folding chair	D. S. White	207,466	Aug. 27, 1878	865	255	14	327
Folding table	J. Bradfield	207,243	Aug. 20, 1878	622	186	14	291
Folding table	W. W. Hart	200,057	Feb. 5, 1878	167	54	13	259
Folding table	W. W. Hart	200,291	Feb. 12, 1878	408	122	13	304
Folding table	R. M. Lambie	208,912	Oct. 15, 1878	502	145	14	567
Folding table	W. H. Palmer	201,042	Mar. 5, 1878	223	70	13	449
Folding table	J. B. Terry	209,940	Nov. 12, 1878	438	133	14	743
Folding table	W. Thomas	210,822	Dec. 10, 1878	472	133	14	894
Folding table	G. A. Trimble	198,826	Jan. 1, 1878	105	30	13	24
Folding table	J. E. Wakefield	201,723	Mar. 26, 1878	948	{ 290 291 }	13	570
Food, Apparatus for preparing animal	J. McKee	202,360	Apr. 16, 1878	548	160	13	684
Food, Apparatus for preparing cereals for	E. Ross and J. W. McLeod	209,715	Nov. 5, 1878	193	57	14	707
Food, Compressed	E. Grivel	201,878	Apr. 2, 1878	21	.....	13	601
Food for horses and cattle	H. Brannhold	210,087	Nov. 19, 1878	611	.....	14	770
Food from beans, Articles of	S. R. Andres	202,975	Apr. 30, 1878	1225	.....	13	782
Foot-power	A. J. Hood	208,316	Sept. 24, 1878	808	236	14	463
Foot-power	W. F. Lane	206,952	Aug. 13, 1878	315	96	14	249

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Foot-rest .....	J. M. Shaw .....	200, 483	Feb. 19, 1878	612	180	13	845
Foot-warmer .....	M. E. Beasley .....	202, 919	Apr. 30, 1878	1172	337	13	775
Ford or dam, Artificial .....	J. M. McCue .....	203, 174	Apr. 30, 1878	1425	416	13	808
Forge .....	T. C. Morrison, E. J. Mildren, and M. Moore .....	200, 502	Feb. 19, 1878	689	203	13	355
Forge, Portable .....	G. B. Phillips .....	202, 461	Apr. 16, 1878	646	189	13	698
Fork:							
<i>See</i> Band-cutting fork. Pickle-fork.							
Carving-fork. Pitchfork.							
Clothes-fork. Potato-fork.							
Hay-fork. Saddle-tree fork.							
Manure-fork.							
Fork .....	W. H. Kretsinger .....	209, 058	Oct. 15, 1878	669	192	14	589
Fork .....	M. Maunier .....	206, 894	Aug. 13, 1878	265	80	14	243
Forks, Manufacture of .....	T. Shaw .....	205, 001	June 18, 1878	625	183	13	1101
Founder's facings .....	A. Wainwright .....	207, 321	Aug. 20, 1878	698	-----	14	301
Fountain:							
<i>See</i> Drinking-fountain. Parlor-fountain.							
Glass-lined fountain. Revolving fountain.							
Fountain .....	F. H. Gay and R. J. Follett .....	199, 821	Jan. 29, 1878	1159	340	13	212
Frame:							
<i>See</i> Awning-frame. Pocket-book frame.							
Caster-frame. Pulley-frame.							
Curtain-drying Quilting-frame.							
frame. Satchel-frame.							
Filtering-frame. Saw-frame.							
Grindstone-frame. Slate-frame.							
Heddle-frame. Soap-frame.							
Mirror-frame. Spectacle and eye-glass							
Mosquito-bar frame. frame.							
Mosquito-net frame. Spinning-frame.							
Photograph-frame. Thrashing-machine							
Photographic-print frame.							
ing frame. Traveling-bag frame.							
Picture-frame. Umbrella-frame.							
Plow-frame. Window frame.							
Frame structures, Machine for erecting .....	S. R. King .....	207, 746	Sept. 3, 1878	164	50	14	370
Freezing apparatus .....	E. Fixary .....	204, 961	June 18, 1878	586	171	13	1097
Fringe .....	A. Moll .....	210, 869	Dec. 17, 1878	535	151	14	911
Frog .....	J. Brahn .....	201, 154	Mar. 12, 1878	339	104	13	473
Fruit and hop drier .....	W. Butts .....	198, 791	Jan. 1, 1878	75	19, 20	13	19
Fruit and packing box .....	M. and R. J. Cooke .....	210, 241	Nov. 26, 1878	788	234	14	797
Fruit and vegetable evaporator .....	J. W. Powers .....	208, 925	Oct. 15, 1878	519	151	14	569
Fruit-basket .....	L. W. Beecher .....	200, 786	Feb. 26, 1878	933	275	13	399
Fruit-basket .....	A. P. Gibson .....	204, 023	May 21, 1878	856	245	13	948
Fruit-box .....	G. O. Cole .....	207, 347	Aug. 27, 1878	743	232	14	312
Fruit-box .....	A. P. Gibson .....	204, 022	May 21, 1878	854	244	13	947
Fruit-box .....	A. P. Gibson .....	206, 719	Aug. 6, 1878	63	21	14	214
Fruit-box .....	J. J. Philbrick .....	207, 440	Aug. 27, 1878	836	247	14	323
Fruit-box .....	W. A. Williams .....	210, 887	Dec. 17, 1878	559	156	14	913
Fruit, Box for dried .....	D. Snedeker .....	208, 698	Oct. 8, 1878	260	74	14	531
Fruit-box handle .....	R. E. Morey .....	201, 036	Mar. 5, 1878	217	68	13	448
Fruit-carrier .....	M. G. Graham .....	210, 320	Nov. 26, 1878	872	256	14	808
Fruit-drier .....	J. Boss .....	206, 295	July 23, 1878	946	268	14	141
Fruit-drier .....	H. Brown .....	202, 699	Apr. 23, 1878	927	265	13	749
Fruit-drier .....	A. C. Burdick .....	206, 860	Aug. 13, 1878	224	72	14	238
Fruit-drier .....	M. S. Lyons .....	209, 620	Nov. 5, 1878	92	27	14	603
Fruit-drier .....	W. C. McDowell and E. C. Ewell .....	205, 662	July 2, 1878	208	62	14	35
Fruit-drier .....	P. Riley .....	200, 479	Feb. 19, 1878	608	179	13	242
Fruit-drier .....	G. W. Rinchart .....	204, 452	June 4, 1878	36	12	13	1017
Fruit-drier .....	J. L. Rogers and J. A. Tuttle .....	206, 618	July 30, 1878	1317	379	14	191
Fruit-drier .....	A. L. Sierer .....	209, 719	Nov. 5, 1878	197	58	14	707
Fruit-drier .....	J. C. Slaughter .....	199, 232	Jan. 15, 1878	532	157	13	99
Fruit-drier .....	O. F. Tiffany .....	201, 131	Mar. 12, 1878	316	97	13	469
Fruit, Drying .....	J. Hyder .....	199, 910	Feb. 5, 1878	25	-----	13	236
Fruit, &c., Drying apparatus for .....	A. Coleman .....	206, 421	July 30, 1878	1111	318	14	165
Fruit-drying house .....	W. H. Rogers .....	205, 683	July 2, 1878	236	70	14	38
Fruit drying or cooking apparatus .....	J. B. Crocker .....	198, 971	Jan. 8, 1878	262	75	13	56
Fruit-gatherer .....	G. W. Baker .....	199, 250	Jan. 15, 1878	548	161	13	161
Fruit-huller .....	A. S. Bunker .....	205, 048	June 18, 1878	671	196	13	1106
Fruit-jar .....	L. Clabaugh .....	202, 093	Apr. 9, 1878	250	74	13	639
Fruit-jar .....	G. W. Gomber .....	200, 188	Feb. 12, 1878	307	91	13	288
Fruit-jar .....	J. H. Phillips .....	202, 753	Apr. 23, 1878	981	282	13	747
Fruit-jar .....	T. W. Synnott .....	200, 229	Feb. 12, 1878	344	102	13	294
Fruit-jar holder .....	J. Woodruff .....	205, 457	June 25, 1878	1103	327	13	1179
Fruit-jar protector .....	S. D. Decon .....	209, 666	Nov. 5, 1878	143	42	14	709
Fruit-jelly .....	J. Millen .....	208, 111	Sept. 17, 1878	171	-----	14	439
Fruit-package .....	E. L. Marshall .....	204, 441	June 4, 1878	27	9	13	1016
Fruit packing box and case .....	P. C. Burke .....	202, 224	Apr. 9, 1878	389	114	13	653
Fruit-picker .....	I. Gothard .....	208, 167	Sept. 17, 1878	637	187	14	439
Fruit-picker .....	G. C. Hawkins .....	208, 090	Sept. 17, 1878	548	164	14	423
Fruit-picker .....	J. Holman .....	203, 457	May 7, 1878	235	67	13	553
Fruit-picker .....	W. V. McConnell and C. M. Dick- erson .....	204, 748	June 11, 1878	337	102	13	1063
Fruit-picker .....	J. C. Miller .....	202, 042	Apr. 2, 1878	183	53	13	625
Fruit-picker .....	W. W. Rodgers .....	210, 654	Dec. 10, 1878	278	76	14	869
Fruit-picker .....	S. R. Ruckel .....	205, 214	June 25, 1878	863	253	13	1137
Fruit-picker .....	G. Shelton .....	207, 988	Sept. 10, 1878	435	131	14	407
Fruit pitting and cutting machine .....	C. P. Bowen .....	204, 189	May 28, 1878	1058	390	13	977
Fruit-pitting machine .....	A. T. Hatch .....	204, 217	May 28, 1878	1084	309	13	980
Fruit, Ripening .....	M. Lamb .....	208, 744	Oct. 8, 1878	309	88	14	537
Frying-pan .....	J. Edgar and A. Bardell .....	200, 033	Feb. 5, 1878	137	45	13	255
Fuel, Apparatus for compressing .....	W. H. Rosewarne .....	208, 929	Oct. 15, 1878	523	152	14	570
Fuel, Apparatus for preparing gaseous .....	W. S. Sutherland .....	206, 642	July 30, 1878	1344	387	14	194

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Fuel-box .....	W. M. Carroll .....	202, 847	Apr. 23, 1878	1084	309	13	760
Fuel-burner .....	G. S. Bosworth .....	208, 221	Sept. 24, 1878	704	207	14	451
Fuel-burner .....	J. M. Hicks .....	200, 139	Feb. 12, 1878	257	77	13	281
Fuel, Compound to increase the combustion of .....	D. C. Breed .....	202, 092	Apr. 9, 1878	250	.....	13	639
Fuel from carbonaceous powders, &c., Manufacture of .....	C. T. Du Motay and E. Stern .....	210, 304	Nov. 26, 1878	854	.....	14	806
Fuel from waste, Extracting .....	N. Schröder .....	206, 266	July 23, 1878	912	.....	14	136
Fuel, Hydrocarbon compound for .....	S. C. Salisbury .....	203, 199	Apr. 30, 1878	1452	.....	13	812
Fuel, Machine for pressing straw, corn-stalks, &c., for .....	E. R. Murdock .....	201, 820	Mar. 26, 1878	1045	319	13	585
Fuel, Preparing gaseous .....	W. S. Sutherland .....	206, 643	May 30, 1878	1345	.....	14	194
Fuel-press .....	N. Aldrich .....	199, 394	Jan. 22, 1878	709	209	13	134
Fulling-mill .....	A. C. Arnold and J. H. Aiken .....	209, 152	Oct. 22, 1878	787	228	14	610
Fulling-mill .....	W. H. Mase and S. Terwilliger .....	203, 355	May 7, 1878	123	36	13	837
Fulling-mills, Measuring attachment to .....	T. W. Clark .....	209, 229	Oct. 22, 1878	862	250	14	620
Fulling-roll .....	C. C. Webber .....	203, 680	May 14, 1878	477	135	13	892
Funnel .....	D. B. Lester .....	202, 734	Apr. 23, 1878	956	275	13	744
Funnel .....	D. Williams .....	201, 472	Mar. 19, 1878	681	208	13	528
Funnel, Measuring .....	D. Hitchcock .....	206, 946	Aug. 13, 1878	311	95	14	248
Funnel, Self-tapping can .....	A. W. P. Ladd .....	203, 924	May 21, 1878	745	214	13	934
Fur robe, Lined .....	G. H. Dimond and S. D. Castle .....	209, 333	Oct. 22, 1878	975	284	14	639
<b>Furnace:</b>							
See Annealing-furnace. Melting-furnace.							
Bagasse-furnace. Metal-heating furnace.							
Blast-furnace. Metallurgic furnace.							
Blast and reverberatory furnace. Ore-desulphurizing furnace.							
Boiler-furnace. Ore-roasting furnace.							
Bone-black furnace. Pigment-furnace.							
Brass-melting furnace. Portable furnace.							
Brick-kiln furnace. Puddling and balling furnace.							
Char-furnace. Quicksilver furnace.							
Cupola-furnace. Reheating-furnace.							
Gas-burning furnace. Reverberating-furnace.							
Gas-generating furnace. Revolving furnace.							
Gas-retort furnace. Smelting-furnace.							
Gasoline-furnace. Smoke-consuming furnace.							
Glass-furnace. Smoke-preventing furnace.							
Heating-furnace. Straw-burning furnace.							
Hot-air furnace. Tire-heating furnace.							
Iron and steel heating furnace. Welding-furnace.							
Link-heating furnace. Wood-burning furnace.							
Furnace .....	H. W. Austin and W. B. Hosford .....	204, 939	June 18, 1878	565	165	13	1094
Furnace .....	W. F. Flaggs .....	190, 529	Jan. 22, 1878	845	247	13	156
Furnace .....	P. J. Stanton and J. Hutchinson .....	203, 666	May 14, 1878	463	132	13	891
Furnace .....	T. W. Williams .....	211, 074	Dec. 17, 1878	790	217	14	941
Furnace and damper regulator .....	R. L. Walker .....	210, 649	Dec. 10, 1878	295	81	14	870
Furnace-door .....	J. Ashcroft .....	205, 337	June 25, 1878	988	{ 292 } { 293 }	13	1154
Furnace-door .....	T. R. Butman .....	199, 182	Jan. 15, 1878	489	144	13	92
Furnace-door .....	P. S. Kemon .....	204, 339	May 28, 1878	1205	344	13	996
Furnace-door .....	J. Morrison .....	208, 415	Sept. 24, 1878	908	266	14	476
Furnace-feeder .....	W. W. Chapin .....	209, 227	Oct. 22, 1878	860	249	14	620
Furnace-feeder .....	W. W. Chapin .....	209, 228	Oct. 22, 1878	861	250	14	620
Furnace-feeder .....	M. H. Smith .....	199, 000	Jan. 8, 1878	292	85, 86	13	61
Furnace for distilling wood and separating the products of distillation. }	J. A. Mathieu .....	208, 835	Oct. 8, 1878	408	{ 118 } { 119 }	14	551
Furnace for heating iron and steel bars .....	C. H. Morgan .....	199, 164	Jan. 15, 1878	469	138	13	89
Furnace-grate .....	W. J. Allen .....	199, 609	Jan. 29, 1878	951	277	13	181
Furnace-grate .....	J. Ashcroft .....	202, 323	Apr. 16, 1878	511	149	13	679
Furnace-grate .....	H. H. Burritt and G. A. Ohl .....	198, 967	Jan. 8, 1878	258	73	13	55
Furnace-grate bar .....	A. Godillot .....	208, 730	Oct. 8, 1878	292	84	14	535
Furnace-grate bar .....	N. Henzel and P. W. Liebieh .....	199, 707	Jan. 29, 1878	1050	307	13	196
Furnaces, Air-distributing pipe for .....	M. M. Snider .....	205, 431	June 25, 1878	1080	320	13	1166
Furnaces, Apparatus for promoting combustion in .....	I. Kendrick .....	209, 273	Oct. 22, 1878	904	263	14	626
Furnaces, Burning fuel in metal-working .....	S. Caddick .....	201, 223	Mar. 12, 1878	404	124	13	483
Furnaces, Device for feeding air to .....	J. A. Warden .....	204, 926	June 18, 1878	554	161	13	1092
Furnaces, Device for supplying steam and air blast to .....	D. S. Elstner .....	203, 434	May 7, 1878	209	60	13	849
Furnaces, Device for supplying steam and air blast to .....	E. J. Jones .....	200, 310	Feb. 12, 1878	427	{ 127 } { 128 }	13	307
Furnaces, Draft-regulator for .....	E. D. Norcross .....	208, 759	Oct. 8, 1878	326	93	14	539
Furnaces, Feeding fuel to .....	A. L. Schultz .....	205, 428	June 25, 1878	1077	319	13	1166
Furnaces, &c., Fire lining and back for .....	O. Earnshaw .....	202, 637	Apr. 23, 1878	860	.....	13	733
Furnaces, &c., Movable fire-bar for .....	A. E. Wackernie .....	210, 827	Dec. 10, 1878	475	134	14	895
Furnaces, Smoke-consuming device for .....	W. M. Kirby .....	209, 898	Nov. 12, 1878	392	117	14	737
Furnaces, Utilizing waste heat of .....	J. Hutton .....	201, 613	Mar. 26, 1878	845	{ 256 } { 257 }	13	554
Furniture-pad .....	P. W. Pratt .....	204, 913	June 18, 1878	537	156	13	1090
Furniture-structure .....	C. Kilburn .....	199, 373	Jan. 22, 1878	686	201	13	131
Fuse, Combination shell .....	E. Rubin and A. Fornerod-Stadler .....	200, 223	Feb. 12, 1878	336	101	13	293
<b>G.</b>							
Gaff for vessels .....	T. C. Thompson .....	202, 485	Apr. 16, 1878	607	195	13	702
<b>Gage:</b>							
See Carpenter's gage. Rain-gage.							
Cutting-gage. Sawing-machine-gage.							
Draw-gage. Sirup-gage.							
Feed-gage. Steadying-gage.							
Measuring-gage. Steam-gage.							
Micrometer-gage. Water-gage.							
Pressure-gage .....							
Gage for indicating the amount of water in oil-cars .....	L. A. Heard .....	200, 138	Feb. 12, 1878	255	77	13	281

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Galley.....	P. Bresnan.....	202, 983	Apr. 30, 1878	1232	356	13	783
Galvanic battery.....	F. C. Bartlett.....	210, 835	Dec. 17, 1878	492	138 139	14	905
Galvanic battery.....	E. B. Cutten.....	206, 106	July 23, 1878	800	229	14	122
Galvanic battery.....	W. W. Griscom.....	207, 270	Aug. 20, 1878	650	193	14	295
Galvanic battery.....	C. A. Hussey.....	201, 924	Apr. 2, 1878	65	17	13	608
Galvanic battery.....	G. Lauder.....	208, 614	Oct. 1, 1878	157	46	14	510
Galvanic belt, Electro.....	H. E. Jacobsen.....	203, 835	May 21, 1878	651	186	13	922
Galvanic chair, Electro.....	S. C. Pratt.....	199, 663	Jan. 20, 1878	1008	293	13	189
Galvanic electrode for curative purposes.....	W. A. Candee.....	201, 157	Mar. 12, 1878	342	105	13	473
Galvanic pile for medical purposes.....	F. J. Tongue.....	209, 632	Nov. 5, 1878	105	31	13	695
Galvanic ring, bracelet, or necklace.....	E. A. Osselin and A. Meyer.....	204, 502	June 4, 1878	77	26	13	1023
Galvanometer, Reflecting.....	W. Thomson.....	209, 942	Nov. 12, 1878	439	134	14	743
Game apparatus.....	M. Entenmann.....	204, 208	May 28, 1878	1075	306	13	979
Game apparatus.....	C. Eusten.....	201, 398	Mar. 19, 1878	613	187	13	518
Game apparatus.....	C. A. Roth.....	200, 571	Feb. 19, 1878	698	205	13	356
Game apparatus.....	J. M. Stewart.....	203, 671	May 14, 1878	469	133	13	801
Game apparatus.....	E. C. Strango.....	202, 071	Apr. 2, 1878	210	61	13	629
Game apparatus.....	G. L. Witsil.....	202, 318	Apr. 9, 1878	487	143	13	672
Game-board.....	H. B. Dennison.....	211, 091	Dec. 17, 1878	698	192	14	930
Game-board.....	E. B. Peirce.....	203, 368	May 7, 1878	139	40	13	839
Game-counter.....	J. H. Dasey.....	207, 396	Aug. 27, 1878	790	235	14	318
Game-counter.....	P. Orth.....	203, 189	Apr. 30, 1878	1438	420	13	810
Game-counter.....	C. B. Weissmann.....	204, 404	May 28, 1878	1271	362	13	1004
Game-counter.....	J. Whitelaw.....	199, 130	Jan. 8, 1878	422	124	13	81
Game-counter for billiard-tables.....	H. W. Collender.....	203, 422	May 7, 1878	194	56	13	847
Game-table.....	W. M. Lloyd.....	209, 818	Nov. 12, 1878	311	93	14	726
Game-table.....	C. F. A. Reesch.....	208, 539	Oct. 1, 1878	83	24	14	500
Game-table.....	G. L. Witsil.....	207, 835	Sept. 10, 1878	268	83	14	386
Garbage-holder.....	R. Cook.....	207, 016	Aug. 13, 1878	377	116	14	256
Garbage-receiver, Odorless.....	J. C. Moore.....	199, 734	Jan. 29, 1878	1073	314	13	199
Garbage-receptacle.....	J. J. Slevin.....	210, 572	Dec. 3, 1878	203	53	14	849
Garden-rake.....	S. D. Carris.....	210, 450	Dec. 3, 1878	64	16	14	832
Garden-sprinkler.....	A. Hodel and F. A. Stauber.....	199, 293	Jan. 15, 1878	595	174	13	108
Garden-sprinkler.....	L. N. Wisewell.....	211, 075	Dec. 17, 1878	791	217	14	941
Garden-tool, Combination.....	J. D. Royce.....	208, 854	Oct. 8, 1878	432	125	14	554
Garlic-separator.....	D. Shamberger and J. Carroll.....	202, 761	Apr. 23, 1878	989	284	13	748
Garment-supporter.....	T. J. Carroll.....	201, 327	Mar. 19, 1878	538	165	13	508
Garment-supporter.....	C. A. Griswold.....	201, 177	Mar. 12, 1878	353	111	13	476
Garment-supporter.....	J. P. Lindsay.....	206, 803	Aug. 6, 1878	149	47	14	225
Garment-supporting clasp.....	S. Porter.....	206, 806	Aug. 13, 1878	267	81	14	243
Garment-supporting clasp.....	W. B. Walker.....	200, 633	Feb. 26, 1878	776	228	13	376
Garment, Water-proof.....	S. L. Worth and J. H. Pontifex.....	201, 640	Mar. 26, 1878	873	266	13	559
Garments, Apparatus for cleaning.....	T. Patton.....	205, 673	July 2, 1878	224	66	14	37
Garter.....	J. H. Vinton and M. E. Fitzpatrick.....	199, 240	Jan. 15, 1878	539	159	13	100
Garter, Elastic.....	J. L. Moore.....	200, 561	Feb. 19, 1878	688	202	13	355
Gas and electric conductor combined.....	E. F. Phillips.....	202, 047	Apr. 2, 1878	187	54	13	825
Gas and other vapors, Apparatus for condensing, washing, and purifying.....	T. M. Kirkham, D. Hulett, S., sr., and S. Chandler, jr.....	206, 736	Aug. 6, 1878	80	25	14	217
Gas and water pipes, cocks, &c., Locking device for.....	J. Miller.....	209, 181	Oct. 22, 1878	818	237	14	614
Gas apparatus.....	H. D. Fitch.....	204, 016	May 21, 1878	848	242 243	13	947
Gas apparatus.....	J. Hanlon.....	203, 909	May 21, 1878	731	209 210	13	932
Gas apparatus.....	J. Hanlon.....	203, 925	May 21, 1878	745	215	13	934
Gas, Apparatus and process for making illuminating.....	M. Gross.....	206, 724	Aug. 6, 1878	67	22	14	215
Gas, Apparatus and process for manufacturing illuminating.....	H. W. Adams.....	204, 181	May 28, 1878	1041	256 297	13	975
Gas, Apparatus for charging water with carbonic acid.....	H. B. Dunham.....	205, 950	July 16, 1878	552	157 158	14	88
Gas, Apparatus for the manufacture of.....	G. W. Harris and A. L. Allen.....	209, 563	Nov. 5, 1878	30	9	14	685
Gas, Apparatus for the manufacture of.....	E. J. Jerzmanowski.....	199, 912	Feb. 5, 1878	26	8, 9	13	237
Gas, Apparatus for the manufacture of illuminating.....	M. H. Strong.....	209, 630	Nov. 5, 1878	103	30	14	695
Gas, Apparatus for washing and condensing coal.....	R. A. Cross.....	203, 003	Apr. 30, 1878	1249	361	13	785
Gas apparatus, Hydrocarbon.....	C. Holland.....	201, 327	Mar. 19, 1878	738	225	13	536
Gas-burner.....	W. Anderson.....	204, 278	May 28, 1878	1140	326	13	967
Gas-burner.....	H. A. Jerauld.....	203, 159	Apr. 30, 1878	1409	411	13	806
Gas-burner.....	J. Matthewman.....	204, 835	June 11, 1878	437	128	13	1073
Gas-burner, Electric.....	C. H. Hinds.....	209, 891	Nov. 12, 1878	386	115	14	738
Gas-burner, Electro-magnetic.....	W. W. Jacques.....	204, 826	June 11, 1878	422	125	13	1072
Gas-burner, Pressure-governing.....	J. N. Chamberlain.....	209, 021	Oct. 15, 1878	624	181	14	583
Gas-burners, Electric apparatus for.....	A. L. Bogart.....	209, 016	Oct. 15, 1878	619	180	14	583
Gas-burners, Electric attachment for.....	A. W. Wright.....	199, 676	Jan. 29, 1878	1021	297	13	191
Gas-burners, &c., Globe-holder for.....	E. A. Locke.....	203, 471	May 7, 1878	248	72	13	854
Gas-burners, Making.....	G. Bray.....	204, 709	June 11, 1878	294	91	13	1037
Gas-burners, Scintillating attachment to.....	W. W. Batchelder.....	204, 286	May 28, 1878	1150	329	13	989
Gas-burning furnace.....	N. Will.....	201, 581	Mar. 19, 1878	799	243	13	544
Gas, Compound for producing illuminating.....	L. Marks.....	199, 654	Jan. 29, 1878	1000	-----	13	188
Gas controlling and lighting apparatus, Thermo and electric.....	G. D. Bancroft.....	205, 032	June 18, 1878	653	193	13	1106
Gas, Device for regulating the flow of.....	E. Tourné.....	210, 226	Nov. 26, 1878	772	229	14	795
Gas-engine.....	J. Brady.....	200, 570	Mar. 5, 1878	148	48	13	438
Gas-exhaust regulator.....	R. K. Huntoon.....	207, 421	Aug. 27, 1878	818	242	14	321
Gas-fixtures, Extension-slide for.....	W. H. Sheppard.....	207, 687	Sept. 3, 1878	102	31	14	362
Gas for heating and other purposes, Furnace for producing.....	P. W. Mackenzie.....	201, 808	Mar. 26, 1878	1034	316	13	583
Gas from gas-wells, Process and apparatus for preparing hydrocarbon.....	W. S. Gillen.....	199, 363	Jan. 22, 1878	678	199	13	130
Gas-generating burner.....	I. Stead and S. H. Bayley.....	207, 828	Sept. 10, 1878	259	81	14	385
Gas-generating furnace.....	C. F. Dieterich.....	209, 114	Oct. 22, 1878	744	216 217	14	604
Gas-generator.....	A. I. and W. R. Ambler.....	209, 597	Nov. 5, 1878	63	19	14	689
Gas-generator.....	J. W. Hodges.....	207, 621	Aug. 27, 1878	925	272	14	334



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Gas generator, Carbonic-acid.	O. Zwietusch	203, 310	May 7, 1878	80	24	13	831
Gas-generator, Metallurgic.	M. J. Hamilton	203, 446	May 7, 1878	225	64	13	851
Gas governing and recording apparatus	D. B. Peebles	210, 352	Nov. 26, 1878	912	267	14	813
Gas-governor.	F. G. Johnson	208, 523	Oct. 1, 1878	67	20	14	498
Gas-light extinguisher	P. Brand and E. J. King	206, 926	Aug. 13, 1878	294	90	14	246
Gas-light extinguisher	P. Brand and E. J. King	210, 603	Dec. 10, 1878	309	84	14	872
Gas-lighter	W. H. Hovey	201, 611	Mar. 26, 1878	843	256	13	554
Gas-lighter	M. Faloon and D. H. Iseminger	201, 918	Apr. 2, 1878	60	16	13	607
Gas-lighter	J. R. Scattergood	199, 747	Jan. 29, 1878	1085	318	13	201
Gas-lighter and automatic extinguisher.	G. S. Dumbar	200, 703	Feb. 26, 1878	855	252	13	387
Gas-lighter, Automatic.	J. L. Miller, H. H. Talmadge, and E. Brown.	206, 032	July 16, 1878	634	184	14	98
Gas-lighting	C. D. P. Gibson	202, 018	Apr. 2, 1878	154	45	13	621
Gas-lighting apparatus, Circuit-changer in electric.	F. V. Sanford	204, 916	June 18, 1878	540	{ 157 158 }	13	1090
Gas-lighting apparatus, Electric	A. L. Bogart	203, 406	May 7, 1878	176	51	13	845
Gas-lighting apparatus, Electric	W. E. Facer	210, 245	Nov. 26, 1878	791	235	14	797
Gas-lighting apparatus, Electric	J. P. Tirrell	206, 057	July 16, 1878	661	191	14	102
Gas-lighting apparatus, Electric	W. H. H. Whiting	209, 594	Nov. 5, 1878	60	18	14	689
Gas-lighting apparatus, Insulated connection for.	C. D. P. Gibson	208, 889	Sept. 24, 1878	881	256	14	473
Gas-lighting, Automatic	A. N. Allen	203, 693	May 14, 1878	491	139	13	894
Gas-lighting burner, Electric	A. L. Bogart	202, 694	Apr. 23, 1878	921	263	13	739
Gas-lighting burners, Electrode for electric	A. T. Smith	206, 272	July 23, 1878	921	261	14	138
Gas-lighting device, Electric	S. G. L. Fox	201, 175	Mar. 12, 1878	356	110	13	476
Gas-lighting device, Electric	J. Pintach and J. Schülke	211, 044	Dec. 17, 1878	759	208	14	937
Gas-machine, Vapor-jet	T. B. Fogarty	201, 101	Mar. 12, 1878	284	88	13	465
Gas, Manufacture of	W. J. Taylor	206, 053	July 16, 1878	656	190	14	101
Gas, Manufacturing	L. A. L. E. P. De la Peyrouse	200, 182	Feb. 12, 1878	299	89, 90	13	288
Gas, Manufacturing	J. A. Stephan	209, 304	Oct. 22, 1878	934	.....	14	630
Gas, Manufacturing illuminating.	T. G. Macy and E. F. Reed	202, 270	Apr. 9, 1878	446	130	13	606
Gas, Manufacturing illuminating.	A. C. Ranc	202, 050	Apr. 2, 1878	189	55	13	626
Gas, Manufacturing illuminating.	J. Shackleton	208, 641	Oct. 1, 1878	188	54	14	514
Gas, Manufacturing water	E. J. Jerzmanowski	204, 437	June 4, 1878	23	.....	13	1016
Gas-meter	A. C. Blount	204, 188	May 28, 1878	1056	300	13	976
Gas-meter	C. W. Isbell	203, 276	May 7, 1878	41	13	13	826
Gas-meter	A. Levy	208, 686	Oct. 8, 1878	250	71	14	530
Gas-meter prover	J. T. Wheeler	205, 456	June 25, 1878	1103	327	13	1170
Gas-pressure regulator	M. W. Kidder	209, 407	Oct. 29, 1878	1048	305	14	650
Gas-pressure regulator	P. Noyes	210, 141	Nov. 19, 1878	668	198	14	778
Gas, Process and apparatus for manufacturing heating and illuminating.	C. Gearing	204, 555	June 4, 1878	122	42	13	1030
Gas, Process and apparatus for manufacturing illuminating.	C. Gearing	204, 554	June 4, 1878	120	41	13	1030
Gas, Process and apparatus for manufacturing illuminating.	G. Ramsdell	202, 374	Apr. 16, 1878	561	{ 164 165 }	13	686
Gas, Process and apparatus for manufacturing water.	W. A. Goodyear	207, 413	Aug. 27, 1878	809	240	14	320
Gas, Process for the continuous preparation of nitrogen.	G. A. Tieutler	207, 086	Aug. 13, 1878	442	.....	14	264
Gas, Process for the manufacture of illuminating	D. W. Hunt	207, 420	Aug. 27, 1878	817	242	14	321
Gas-purifiers, Screen or grid for	H. H. Church	205, 727	July 9, 1878	300	88	14	50
Gas, Purifying	H. W. Merritt	209, 350	Oct. 29, 1878	995	289	14	642
Gas, Purifying and increasing the illuminating power of.	O. Lugo	209, 698	Nov. 5, 1878	176	.....	14	704
Gas-purifying apparatus	T. N. Kirkham, D. Hulet, S., jr., and J. Chandler.	199, 450	Jan. 22, 1878	757	222	13	142
Gas-regulator	J. Adams	208, 134	Sept. 17, 1878	599	178	14	434
Gas-regulator	J. Adams	209, 638	Nov. 5, 1878	113	33	14	696
Gas-regulator	J. L. Chapman	210, 750	Dec. 10, 1878	398	108	14	883
Gas-regulator	G. S. Lacey	207, 187	Aug. 20, 1878	562	169	14	283
Gas-regulator	M. Leas	209, 905	Nov. 12, 1878	399	119	14	738
Gas-regulator	E. J. Meredith	203, 285	May 7, 1878	52	16	13	827
Gas-regulator	J. Miller, jr.	201, 270	Mar. 12, 1878	457	141	13	490
Gas-regulator	A. W. Porter and F. M. Grimes	205, 678	July 2, 1878	229	68	14	38
Gas-regulator	G. W. Thompson	198, 862	Jan. 1, 1878	140	40	13	30
Gas-regulator	F. E. Vail	207, 832	Sept. 10, 1878	264	82	14	386
Gas-regulator for retorts	L. G. McCauley	207, 052	Aug. 13, 1878	410	127	14	260
Gas-regulator, High-pressure	J. M. Foster and G. E. Lockwood	210, 314	Nov. 26, 1878	863	253	14	807
Gas-retort	W. F. Browne	208, 710	Oct. 8, 1878	271	77	14	533
Gas-retort	J. Burns	200, 820	Mar. 5, 1878	6	2	13	416
Gas-retort	D. Davison	204, 544	June 4, 1878	112	38	13	1028
Gas-retort charger	A. Q. Ross	199, 316	Jan. 15, 1878	621	180	13	113
Gas-retort furnace	G. Liegel	208, 106	Sept. 17, 1878	566	169	14	430
Gas-retorts, Charging-scoop for	T. H. Birch	200, 888	Mar. 5, 1878	72	25	13	426
Gas-retorts, Lid for	N. Jamin	204, 576	June 4, 1878	143	48	13	1033
Gas-retorts, Preventing loss of heat in charging	J. Slade	206, 144	July 16, 1878	755	217	14	112
Gas, Scintillator for lighting	W. W. Batchelder	204, 285	May 28, 1878	1145	328	13	988
Gas-scrubber	C. V. Smith and W. Farmer	207, 216	Aug. 20, 1878	592	{ 177 178 }	14	287
Gas scrubber and washer combined	J. Balmore	199, 492	Jan. 22, 1878	799	235	13	149
Gas-test meter	D. M. Small	208, 271	Sept. 24, 1878	763	223	14	458
Gas-tubing, Flexible	W. Bourguignon	207, 489	Aug. 27, 1878	801	262	14	330
Gas-works, By-pass for	H. G. Morris	200, 799	Feb. 26, 1878	947	279	13	402
Gas-works, Center-seal for	C. V. Smith and W. Farmer	208, 644	Oct. 1, 1878	191	55	14	514
Gases, Apparatus for washing	D. N. Jones	204, 577	June 4, 1878	144	48	13	1033
Gases, Recovery of waste nitrous	B. C. Molloy and J. D. Warren	198, 770	Jan. 1, 1878	58	.....	13	16
Gasket	W. Wallace and J. King	199, 601	Jan. 22, 1878	917	209	13	168
Gasoline-burner	F. A. Lyman	200, 464	Feb. 19, 1878	593	175	13	349
Gasoline-furnace, Tinnens' and roofers'.	C. Gefroer	210, 114	Nov. 19, 1878	639	189	14	774
Gate: See Bridge-gate. Change-gate. End-gate. Farm-gate. Fence-gate.	Flood-gate. Iron gate. Railway-gate. Water-gate. Water-wheel gate.						
Gate	W. B. Allen	207, 149	Aug. 20, 1878	522	157	14	278



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Gate .....	M. S. and C. B. Austin .....	199, 681	Jan. 29, 1878	1026	299	13	191
Gate .....	E. W. Beebe .....	202, 508	Apr. 16, 1878	686	202	13	704
Gate .....	R. J. Booth .....	210, 660	Dec. 10, 1878	305	83	14	872
Gate .....	F. J. Borgia .....	200, 430	Feb. 19, 1878	560	165	13	335
Gate .....	J. N. Brokaw .....	206, 080	July 16, 1878	682	197	14	104
Gate .....	A. B. Clayton .....	203, 005	May 21, 1878	838	239	13	945
Gate .....	N. B. Cooksey .....	198, 838	Jan. 1, 1878	116	33	13	27
Gate .....	S. Cristy and D. Jay .....	200, 514	Feb. 19, 1878	639	188	13	347
Gate .....	B. Cross .....	206, 290	July 23, 1878	951	269	14	142
Gate .....	D. C. Delinger .....	206, 092	July 16, 1878	695	201	14	106
Gate .....	D. Edgar .....	202, 422	Apr. 16, 1878	608	178	13	693
Gate .....	J. Flinner .....	200, 825	Mar. 5, 1878	10	4	13	416
Gate .....	H. Galbraith .....	205, 853	July 9, 1878	434	123	14	68
Gate .....	J. E. Garrett .....	207, 600	Sept. 3, 1878	16	6	14	351
Gate .....	R. Gray .....	200, 655	Feb. 26, 1878	807	237	13	380
Gate .....	J. Greig .....	206, 314	July 23, 1878	970	276	14	144
Gate .....	H. W. Hadley and J. M. Dean .....	209, 257	Oct. 22, 1878	886	258	14	624
Gate .....	J. D. Haggman .....	200, 716	Feb. 26, 1878	870	255	13	389
Gate .....	C. D. and I. Haldeman .....	209, 040	Oct. 15, 1878	644	186	14	586
Gate .....	I. S. Hastings and W. S. Cock .....	207, 032	Aug. 13, 1878	391	121	14	258
Gate .....	J. S. Henshaw .....	208, 076	Oct. 15, 1878	574	167	14	577
Gate .....	J. Hill .....	207, 274	Aug. 20, 1878	655	194	14	295
Gate .....	W. C. Hooker .....	199, 441	Jan. 23, 1878	749	220	13	141
Gate .....	W. H. Hubbard .....	210, 338	Dec. 17, 1878	624	173	14	921
Gate .....	B. B. Huntington .....	202, 728	Apr. 23, 1878	951	273	13	743
Gate .....	M. Jeffries .....	201, 614	Mar. 26, 1878	847	257	13	555
Gate .....	J. E. Johnston .....	200, 398	Feb. 19, 1878	529	156	13	330
Gate .....	M. Kelter and P. Leickem .....	201, 018	Mar. 5, 1878	197	63	13	445
Gate .....	J. Kesselring .....	200, 201	Feb. 12, 1878	318	95	13	290
Gate .....	A. Lee .....	205, 167	June 18, 1878	726	216	13	1115
Gate .....	P. Listeman .....	208, 746	Oct. 8, 1878	310	89	14	538
Gate .....	D. McCurdy .....	199, 847	Jan. 29, 1878	1182	347	13	216
Gate .....	J. Medhurst .....	207, 129	Aug. 20, 1878	505	152	14	276
Gate .....	J. M. Mendenhall .....	205, 565	July 2, 1878	109	31	14	23
Gate .....	W. G. Mentzer .....	200, 555	Feb. 19, 1878	683	201	13	354
Gate .....	T. J. Miller .....	203, 479	May 7, 1878	256	74	13	855
Gate .....	S. W. Moore .....	204, 497	June 4, 1878	73	25	13	1023
Gate .....	P. Philippi .....	200, 840	Mar. 5, 1878	28	10	13	419
Gate .....	C. D. Reed .....	200, 341	Feb. 12, 1878	461	136	13	212
Gate .....	A. Rekart .....	201, 288	Mar. 12, 1878	479	146	13	493
Gate .....	I. M. Rhodes .....	210, 361	Nov. 26, 1878	921	268	14	814
Gate .....	A. G. Rockfellow .....	201, 703	Mar. 26, 1878	927	284	13	567
Gate .....	G. W. Rodebaugh .....	203, 196	Apr. 30, 1878	1450	424	13	811
Gate .....	S. Rogers .....	199, 227	Jan. 15, 1878	528	155	13	98
Gate .....	P. H. Rude .....	203, 205	May 7, 1878	63	20	13	829
Gate .....	P. Smith .....	198, 858	Jan. 1, 1878	137	39	13	30
Gate .....	J. W. Stevenson .....	204, 631	June 4, 1878	208	66	13	1042
Gate .....	J. R. Talley .....	206, 150	July 16, 1878	767	220	14	114
Gate .....	O. L. Taylor .....	199, 480	Jan. 23, 1878	738	232	13	147
Gate .....	M. W. Tucker .....	199, 758	Jan. 29, 1878	1093	321	13	203
Gate .....	J. Wilson .....	203, 396	May 7, 1878	168	48	13	844
Gate .....	T. O. Williams and W. F. Hubbell .....	202, 620	Apr. 16, 1878	823	238	13	719
Gate .....	H. S. Wolfe .....	201, 319	Mar. 12, 1878	516	158	13	497
Gate .....	R. Yale .....	193, 311	Jan. 15, 1878	644	188	13	116
Gate and door fastening .....	E. S. Hunt .....	207, 120	Aug. 20, 1878	495	148	14	275
Gate and door fastening .....	C. T. Sweet .....	200, 106	Feb. 5, 1878	217	67	13	266
Gate-fastener .....	R. J. Booth .....	210, 659	Dec. 10, 1878	394	83	14	872
Gate for patterns .....	W. Taylor .....	204, 510	June 4, 1878	84	28	13	1024
Gate-hanger .....	W. S. Dangler .....	199, 037	Jan. 8, 1878	324	95	13	66
Gate-hanger .....	J. S. Smith .....	207, 825	Sept. 10, 1878	255	80	14	385
Gate-operating mechanism .....	A. R. Sherman .....	205, 217	June 25, 1878	897	254	13	1138
Gauntlet-fastener .....	R. D. Burr .....	206, 062	Aug. 6, 1878	5	2	14	207
Gear, Change-speed .....	S. D. Locke .....	204, 585	June 4, 1878	157	51	13	1035
Gear-cutting machine .....	J. A. Peer .....	204, 756	June 11, 1878	344	104	13	1063
Gear-wheels, Apparatus for forming molds for .....	J. H. Felthousen .....	199, 526	Jan. 22, 1878	842	246	13	155
Gearing .....	W. J. McDougall .....	207, 430	Aug. 27, 1878	826	244	14	322
Gearing for transmission of power .....	J. T. Hawkins .....	199, 203	Jan. 15, 1878	508	149	13	95
Gem-setting .....	V. Draper .....	210, 303	Nov. 26, 1878	853	251	14	806
Gems, Setting for .....	W. A. Bates .....	202, 402	Apr. 16, 1878	588	173	13	690
Generator:							
See Hydrocarbon-vapor generator.	Steam-generator.						
Ozone-generator.	Vinegar-generator.						
Glass and glassware, Annealing .....	H. Gerike .....	202, 809	Apr. 23, 1878	1042	.....	13	755
Glass-annealing .....	C. R. Weyer .....	210, 731	Dec. 10, 1878	377	.....	14	881
Glass annealing and working furnace .....	W. Hirsch .....	206, 109	July 16, 1878	716	206	14	108
Glass, Apparatus and process for annealing .....	A. Weyer .....	207, 924	Sept. 10, 1878	367	112	10	338
Glass, Applying designs, &c., to .....	J. Gast .....	210, 416	Dec. 3, 1878	30	.....	14	827
Glass, &c., by fuming with vapors or gases, Producing colors on .....	F. S. Shirley .....	207, 077	Aug. 13, 1878	434	124	14	263
Glass by means of a sand-blast, Apparatus for engraving .....	J. Whittaker .....	203, 395	May 7, 1878	168	48	13	843
Glass casts from molds, Apparatus for receiving .....	R. J. Beatty and L. Zimmerman .....	206, 386	July 30, 1878	1073	307	14	161
Glass, Etching on .....	J. Umvin .....	205, 446	June 25, 1878	1096	.....	13	1168
Glass from lava, Manufacture of .....	F. S. Shirley .....	204, 384	May 28, 1878	1251	356	13	1002
Glass-furnace .....	J. M. Brookfield .....	200, 973	Mar. 5, 1878	150	49	13	436
Glass-furnace .....	W. Leighton, Jr. .....	208, 527	Oct. 1, 1878	72	21	14	499
Glass, Hardening, tempering, and pressing .....	F. Siemens .....	199, 583	Jan. 22, 1878	896	263	13	164
Glass-house pot .....	T. Collin .....	209, 606	Nov. 5, 1878	74	21	14	690
Glass-lined fountain .....	F. W. Wiesebeck .....	201, 142	Mar. 12, 1878	329	100	13	471
Glass, Machine for grinding, smoothing, and polishing .....	I. Beger and W. H. King .....	201, 738	Mar. 26, 1878	964	295	13	573
Glass, Manufacture of milk or alabaster .....	J. Kempner .....	210, 331	Nov. 23, 1878	884	.....	14	809

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Glass, Manufacture of toughened enameled	F. Siemens	205,981	July 16, 1878	588		14	92
Glass-melting furnace	H. Kirk	208,401	Sept. 24, 1878	892	260	14	474
Glass-mold	J. H. Hobbs	206,111	July 16, 1878	718	207	14	108
Glass-molds, Lift for	E. Anderson and A. Sperber	204,519	June 4, 1878	93	31	13	1026
Glass, &c., Ornamenting	C. Fontayne	208,584	Oct. 1, 1878	132		14	507
Glass, Ornamenting articles of	W. J. Hodgetts	210,326	Nov. 26, 1878	879	258 } 259 }	14	809
Glass, Plunger for pressing	G. W. Weyman	206,157	July 16, 1878	774	222	14	115
Glass-press	G. W. Weyman	207,327	Aug. 20, 1878	703	209	14	302
Glass, Tempering	G. E. Hatch	202,544	Apr. 16, 1878	745		13	710
Glass, Tempering	F. S. Shirley	208,207	Sept. 17, 1878	677	198 } 199 }	14	444
Glass vessel, Incased	D. W. Norris	208,628	Oct. 1, 1878	172	50, 51	14	512
Glass vessel, Metal-lipped	T. B. Atterbury	200,120	Feb. 12, 1878	240	73	13	279
Glass vessels, Metallic neck for	J. T. Cody	199,264	Jan. 15, 1878	569	166	13	104
Glass vessels, Mold for blowing	J. W. Haines	207,656	Sept. 3, 1878	75	22	14	358
Glass with gold, silver, and other metals, Ornamenting	J. Jochem and R. Herrmann	203,858	May 21, 1878	655		13	922
Glassware, Apparatus for frosting	E. D. Dithridge	206,392	July 30, 1878	1080	308	14	161
Glassware, Flaring and crimping	G. W. Blair	201,589	Mar. 26, 1878	819	249	13	551
Glassware for the purpose of shaping and finishing, Preparing articles of	G. W. Blair	207,241	Aug. 20, 1878	620	185	14	291
Glassware, Glory-hole furnace for finishing	R. M. Atwater	206,761	Aug. 6, 1878	104	33	14	220
Glassware, Glory-hole or reheating-furnace for	W. Fox	202,533	Apr. 16, 1878	731	211	13	708
Glassware, Machine for finishing open-ended	D. Challinor	202,631	Apr. 23, 1878	853	245	13	732
Glassware, Manufacture of	T. B. Atterbury	205,781	July 9, 1878	356	103 } 104 }	14	57
Glassware, Manufacture of	D. Bennett	210,984	Dec. 17, 1878	678	187	14	927
Glassware, Manufacture of	D. Challinor	199,030	Jan. 8, 1878	319	94	13	65
Glassware, Manufacture of	J. H. Hobbs	198,741	Jan. 1, 1878	11	2	13	10
Glassware, Manufacture of	D. C. Ripley	206,617	July 30, 1878	1316	379	14	190
Glassware, Mold for decorating	H. S. McKee	206,596	July 30, 1878	1296	372	14	188
Glassware, Ornamenting	A. Harcum	202,647	Apr. 23, 1878	872	250	13	734
Glazed ware, Marking and ornamenting	W. F. Niedringhaus	207,543	Aug. 27, 1878	953		14	338
Globe-holder	A. G. Bayles and C. A. Hunter	204,184	May 28, 1878	1052	208	13	976
Globe, Terrestrial	M. Turnbull and J. Foster	209,993	Nov. 19, 1878	506	153 } 154 }	14	756
Glove	A. C. Butts	198,921	Jan. 1, 1878	205	58	13	40
Glove	S. Goge	210,775	Dec. 10, 1878	424	118	14	888
Glove	A. Hesthal	206,567	July 30, 1878	1268	364	14	185
Glove	S. O. Parker	199,738	Jan. 29, 1878	1077	315	13	200
Glove, Boxing	A. C. Butts	207,591	Sept. 3, 1878	8	3	14	350
Glove, Corn-husking	C. M. Townsend	203,959	May 21, 1878	785	225	13	939
Glove-fastener	A. B. Kittson	206,883	Aug. 13, 1878	247	78	14	241
Glove-fastening	J. F. Field	199,528	Jan. 22, 1878	845	247	13	156
Glove-fastening	G. Havell	200,058	Feb. 5, 1878	168	54	13	259
Gloves for surgical operations, Manufacture of	T. Forster	208,586	Oct. 1, 1878	134	39	14	507
Glue, Apparatus for cooling and spreading	E. W. Leggett	205,968	July 16, 1878	571	163	14	90
Glue, Spreading and drying	E. W. Leggett	210,130	Nov. 19, 1878	656	195	14	776
Glucose, Manufacturing	N. Pigeon	203,935	May 21, 1878	756	218	13	936
Goblets or cups, Cover for	H. H. C. Arnold	209,851	Nov. 12, 1878	349	104	14	731
Gold and silver ores for milling, Preparing	R. M. Fryer	205,536	July 2, 1878	76		14	19
Gold, Apparatus for saving float	J. J. Muller	208,535	Oct. 1, 1878	79	23	14	500
Gold-leaf cutters, Mold-holder for	E. Henderson	203,620	May 14, 1878	414	118	13	885
Gong-pull, Pneumatic	H. V. Alken	207,360	Aug. 27, 1878	774	230	14	316
Governor and cut-off for engines, Automatic	D. O. Ladd	207,608	Sept. 3, 1878	24	9	14	352
Governor-controlling mechanism	J. S. Wilson	204,693	June 11, 1878	278	86	13	1035
Governor, Engine	H. T. Farnsworth	209,612	Nov. 5, 1878	80	23, 24	14	691
Governor, Engine	R. Hooper	205,089	June 18, 1878	711	211	13	1113
Governor, Engine	C. C. Jenkins	204,827	June 11, 1878	422	125	13	1072
Governor for fluid-pressure engines	B. Brazelle	208,067	Sept. 17, 1878	528	158	14	425
Governor for valve-motions	H. Tabor	206,500	July 30, 1878	1198	344	14	176
Governor	G. E. Banner	203,699	May 14, 1878	499	141	13	895
Governor	H. T. Farnsworth	199,149	Jan. 15, 1878	456	134	13	87
Governor	H. W. Fouts	202,430	Apr. 16, 1878	616	180	13	694
Governor	W. H. Fruen	210,847	Dec. 17, 1878	509	144	14	808
Governor	J. A. Rigby	202,121	Apr. 9, 1878	281	82, 83	13	643
Governor	C. B. Smith	206,692	Aug. 6, 1878	38	11	14	211
Governor	J. W. Thompson and N. Hunt	204,924	June 18, 1878	550	160	13	1092
Governor	E. Towns	202,892	Apr. 23, 1878	1130	325	13	706
Governor, Marine-engine	J. A. Svedberg	208,274	Sept. 24, 1878	767	224	14	458
Governor, Marine-engine	G. Westinghouse, jr.	205,710	July 2, 1878	262	78	14	41
Governor, Meter	W. N. Milsted	199,925	Feb. 5, 1878	38	12	13	238
Governor, Pumping-engine	E. L. Otis	208,489	Oct. 1, 1878	33	11	14	493
Governor, Steam-engine	B. Brazelle	208,149	Sept. 17, 1878	614	182	14	436
Governor, Steam-engine	W. H. Craig	202,352	Apr. 16, 1878	519	152	13	680
Governor, Steam-engine	L. R. Moore and J. C. Scott	207,976	Sept. 10, 1878	421	127	14	406
Governor, Steam-engine	P. Grimm	198,978	Jan. 8, 1878	268	77	13	57
Governor, Steam-engine	A. Yount	206,849	Aug. 6, 1878	201	64	14	231
Governor, Wind-wheel	J. Phillips	199,464	Jan. 22, 1878	773	227	13	145
Grader, Road	M. Ammel	204,699	June 11, 1878	283	88	13	1056
Grader, Road	A. Donason	207,594	Sept. 3, 1878	10	4	14	350
Grader, Road	B. C. Meguier	206,120	July 16, 1878	731	210	14	109
Grading and ditching machine	D. H. Gray	208,497	Oct. 1, 1878	42	13, 14	14	495
Grading-machine	W. L. Freese	202,163	Apr. 9, 1878	331	97	13	650
Grafting implement	W. H. Gray	210,420	Dec. 3, 1878	32	7	14	828
Gram and middlings drier	E. H. Gratiot	200,908	Mar. 5, 1878	90	31	13	429
Grain-bagging apparatus	T. H. Relph	200,342	Feb. 12, 1878	462	136	13	312
Grain-band	G. A. Brackett	202,697	Apr. 23, 1878	925	264	13	739
Grain-bin	J. A. Wolley	202,911	Apr. 23, 1878	1148	350	13	768
Grain-binder	J. F. Appleby	208,137	Sept. 17, 1878	603	179	14	435
Grain-binder	W. R. Baker and C. B. Withing-ton	201,149	Mar. 12, 1878	335	102 } 103 }	13	472
Grain-binder	C. Colahan	198,735	Jan. 1, 1878	3	1	13	9
Grain-binder	C. Colahan	201,993	Apr. 2, 1878	130	38	13	618
Grain-binder	E. Dederick	201,228	Mar. 12, 1878	411	126	13	483

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Grain-binder .....	E. Dederick .....	200,609	Nov. 5, 1878	77	22	14	691
Grain-binder .....	L. Erpelding .....	205,067	June 18, 1878	688	202 203 204	13	1110
Grain-binder .....	N. B. Fassett .....	202,803	Apr. 23, 1878	1030	296 297 298	13	754
Grain-binder .....	J. Garrard .....	199,637	Jan. 29, 1878	982	296	13	185
Grain-binder .....	G. T. Gifford .....	207,655	Sept. 3, 1878	73	22	14	356
Grain-binder .....	J. F. Gordon .....	210,319	Nov. 26, 1878	807	255 256	14	666
Grain-binder .....	J. F. Gordon .....	210,520	Dec. 3, 1878	139	36	14	641
Grain-binder .....	H. A. and W. M. Holmes .....	210,533	Dec. 3, 1878	150	41	14	643
Grain-binder .....	G. H. Howe .....	204,329	May 28, 1878	1194	340 341	12	904
Grain-binder .....	A. S. Hoyt .....	201,346	Mar. 19, 1878	556	170 171	13	510
Grain-binder .....	I. Karel .....	208,741	Oct. 8, 1878	303	87, 88	14	537
Grain-binder .....	M. A. Keller .....	200,544	Feb. 19, 1878	669	197 198	13	252
Grain-binder .....	M. A. Keller .....	207,123	Aug. 20, 1878	499	150	14	276
Grain-binder .....	M. A. Keller .....	209,050	Oct. 15, 1878	670	192 193 194	14	500
Grain-binder .....	R. O. Kinne .....	203,625	May 14, 1878	417	119	13	885
Grain-binder .....	S. D. Locke .....	203,108	Apr. 30, 1878	1417	412 414	13	807
Grain-binder .....	W. Lottridge .....	211,027	Dec. 17, 1878	727	200 201	14	923
Grain-binder .....	J. S. Marsh .....	210,949	Dec. 17, 1878	635	176	14	923
Grain-binder .....	A. G. McIntosh .....	204,989	June 18, 1878	612	179 180	13	1100
Grain-binder .....	F. E. McNall .....	190,219	Jan. 15, 1878	521	153 154	13	97
Grain-binder .....	D. McPherson .....	200,868	Mar. 5, 1878	53	19	13	423
Grain-binder .....	L. Miller .....	198,898	Jan. 1, 1878	179	51	13	36
Grain-binder .....	L. Miller .....	198,899	Jan. 1, 1878	182	51, 52	13	37
Grain-binder .....	D. Olmsted, C. L. Travis, and C. R. Chute .....	202,747	Apr. 23, 1878	972	279 280	13	746
Grain-binder .....	A. Ross and S. J. Parker .....	207,821	Sept. 10, 1878	250	79	14	284
Grain-binder .....	J. F. Seiberling .....	206,834	Aug. 6, 1878	178	57	14	228
Grain-binder .....	J. F. Steward .....	210,723	Dec. 10, 1878	370	101	14	680
Grain-binder .....	C. L. Travis and C. R. Chute .....	205,442	June 25, 1878	1091	323	13	1168
Grain-binder .....	C. L. Travis .....	209,149	Oct. 22, 1878	784	228	14	609
Grain-binder .....	C. Van Houten .....	208,002	Sept. 10, 1878	449	135 136	14	400
Grain-binder .....	E. R. Whitney .....	206,846	Aug. 6, 1878	195	62, 63	14	230
Grain-binders, Sheaf-dropper for .....	J. Branning .....	206,530	July 30, 1878	1225	352	14	179
Grain-binders, Spool and take-up for .....	S. D. Locke .....	207,612	Sept. 3, 1878	27	10	14	333
Grain cleaner and scourer .....	D. H. Karns and J. Ream .....	201,251	Mar. 12, 1878	437	134 135	13	487
Grain cleaning and scouring machine .....	J. H. Teahl .....	201,300	Mar. 12, 1878	491	151	13	404
Grain-cleaning machine .....	J. L. Kidwell and J. A. Maloney .....	209,173	Oct. 22, 1878	808	234	14	613
Grain-cleaning machine .....	J. A. Maloney and D. L. Shoemaker .....	209,177	Oct. 22, 1878	814	235	14	613
Grain-cradle .....	R. Winterbotham .....	210,388	Nov. 26, 1878	954	276 277	14	618
Grain-cutting machine .....	V. P. Kimball .....	203,348	May 7, 1878	115	33, 34	13	836
Grain-decorating apparatus .....	A. Ames .....	204,277	May 28, 1878	1139	326	13	967
Grain-distributing machine .....	H. Fascher and A. A. Singer .....	204,308	May 28, 1878	1172	334	13	982
Grain-drier .....	G. Clark .....	199,793	Jan. 29, 1878	1131	332	13	208
Grain-drier .....	J. Corbin .....	205,530	July 2, 1878	70	20	14	18
Grain-drier .....	H. Cutler .....	203,004	Apr. 30, 1878	1251	362	13	785
Grain, &c., drier .....	D. A. Flumerfelt .....	206,431	July 30, 1878	1123	321	14	167
Grain-drier .....	O. Holden .....	201,785	Mar. 26, 1878	1013	309	13	580
Grain-drier .....	P. Provost .....	203,933	May 21, 1878	754	217	13	935
Grain-drier .....	M. P. Smith and W. W. Woolford .....	209,589	Nov. 5, 1878	54	10, 17	14	668
Grain-drier .....	R. H. Tiernan .....	205,012	June 18, 1878	634	166	13	1103
Grain-drying apparatus .....	H. G. Seeber .....	202,124	Apr. 9, 1878	285	84	13	644
Grain drying, scouring, and cleaning apparatus .....	H. B. Hebert .....	203,540	May 14, 1878	339	97	13	873
Grain-drill .....	J. S. Bogle .....	201,643	Mar. 26, 1878	875	266 267	13	559
Grain-drill .....	T. C. Clark .....	207,503	Aug. 27, 1878	904	266	14	331
Grain-drill .....	B. DeLong .....	209,386	Oct. 29, 1878	1030	299	14	647
Grain-drill .....	J. R. Finch .....	201,341	Mar. 19, 1878	552	169	13	510
Grain-drill .....	T. D. Gere .....	208,588	Sept. 24, 1878	880	256	14	473
Grain-drill .....	E. D. Mead .....	205,285	June 25, 1878	927	275	13	1147
Grain-drill .....	E. M. Morgan .....	206,189	July 23, 1878	825	235	14	125
Grain-drill .....	W. H. Nauman .....	205,892	July 9, 1878	474	135 136	14	73
Grain-drill .....	A. Runyan .....	210,304	Nov. 26, 1878	923	269	14	815
Grain-drill .....	J. M. Smith and H. W. C. Thomas .....	200,227	Feb. 12, 1878	342	12	13	294
Grain-drill .....	J. M. Smith and H. W. C. Thomas .....	210,719	Dec. 10, 1878	365	100	14	879
Grain-drill .....	M. W. Smith and E. J. Richey .....	210,973	Dec. 17, 1878	663	183	14	926
Grain-drill and fertilizer combined .....	M. V. Dadisman .....	202,240	Apr. 9, 1878	406	118	13	660
Grain-drill attachment .....	B. Town .....	208,549	Oct. 1, 1878	91	27	14	501
Grain-drill cleaner .....	J. W. Lucas .....	208,982	Oct. 15, 1878	570	168	14	577
Grain-drill colter .....	J. T. West .....	207,377	Aug. 27, 1878	997	291	14	343
Grain-drill feed .....	P. P. Mast and C. O. Gardiner .....	208,834	Oct. 8, 1878	407	117 118	14	351
Grain-drill hoe .....	A. Landis .....	206,884	Aug. 13, 1878	248	78	14	241
Grain-drills, Feed-wheel for .....	J. Burroughs .....	200,253	Feb. 12, 1878	369	109	13	298
Grain-drills, Force-feed for .....	A. J. Martin .....	201,029	Mar. 5, 1878	209	66	13	447
Grain-drills, Force-feed for .....	J. F. Winchell .....	201,079	Mar. 5, 1878	257	81	13	453
Grain-drills, Interchangeable gearing for .....	C. Perrin .....	209,833	Nov. 12, 1878	327	98	14	729

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Grain-drills, Spring-hoe for.....	C. E. Patric .....	204, 365	May 28, 1878	1234	351	13	999
Grain drilling and seeding machine.....	P. P. Mast and C. O. Gardiner .....	205, 971	July 16, 1878	573	164 165	14	90
Grain-dropper .....	A. P. Powers .....	210, 355	Nov. 26, 1878	914	267	14	813
Grain-dumping device .....	A. Smith .....	199, 112	Jan. 8, 1878	398	118	13	78
Grain-elevator .....	O. D. Spalding .....	204, 103	May 21, 1878	938	268	13	958
Grain-elevator .....	J. E. Walsh .....	207, 323	Aug. 20, 1878	698	208	14	301
Grain-elevator, Wet .....	G. Bartholomae .....	202, 401	Apr. 16, 1878	587	172	13	690
Grain gleaner and binder .....	M. G. Hubbard .....	208, 736	Oct. 8, 1878	298	86	14	536
Grain gleaner and binder .....	M. G. Hubbard and J. D. Heelner .....	208, 737	Oct. 8, 1878	299	86	14	536
Grain-meter .....	J. C. Hunt .....	202, 172	Apr. 9, 1878	340	99	13	651
Grain-meter .....	H. Snider .....	207, 688	Sept. 3, 1878	103	31	14	362
Grain, Method of handling .....	S. E. Worrell .....	205, 778	July 9, 1878	353	102	14	57
Grain-scourer .....	G. Moench .....	207, 294	Aug. 20, 1878	673	200	14	298
Grain scouring and cleaning machine .....	M. Forman .....	201, 767	Mar. 26, 1878	995	304	13	577
Grain-scouring apparatus .....	G. E. Throop .....	199, 670	Jan. 29, 1878	1016	296	13	190
Grain-scouring machine .....	C. Schaschne .....	207, 307	Aug. 20, 1878	685	204	14	299
Grain-screen .....	A. S. Clough .....	206, 663	Aug. 6, 1878	6	2	14	207
Grain-separator .....	S. E. Adams .....	201, 975	Apr. 2, 1878	112	33	13	615
Grain-separator .....	J. Allonas .....	209, 208	Oct. 22, 1878	843	243	14	617
Grain-separator .....	H. A. Barnard .....	207, 236	Aug. 20, 1878	612	184	14	290
Grain-separator .....	T. Barnes .....	203, 874	May 21, 1878	690	196 197	13	927
Grain-separator .....	J. F. Becker .....	207, 842	Sept. 10, 1878	275	85	14	387
Grain-separator .....	R. Clarke .....	206, 929	Aug. 13, 1878	296	90	14	246
Grain-separator .....	B. S. Constant .....	206, 229	July 23, 1878	871	248	14	131
Grain-separator .....	G. W. Earhart .....	208, 896	Oct. 15, 1878	488	140 141	14	565
Grain-separator .....	G. Eckles .....	203, 717	May 14, 1878	517	147	13	897
Grain-separator .....	W. N. Esselstyn .....	204, 889	June 18, 1878	513	150	13	1087
Grain-separator .....	J. Essig .....	208, 726	Oct. 8, 1878	288	82, 83	14	535
Grain-separator .....	J. T. Ewan .....	206, 711	Aug. 6, 1878	55	17	14	213
Grain-separator .....	J. Davies .....	203, 325	May 7, 1878	96	27	13	833
Grain-separator .....	A. B. Farquhar .....	207, 170	Aug. 20, 1878	544	163	14	281
Grain-separator .....	H. E. Geiss .....	198, 975	Jan. 8, 1878	266	76	13	57
Grain-separator .....	B. A. Grant .....	199, 151	Jan. 15, 1878	458	135	13	87
Grain-separator .....	D. O. Harshman .....	206, 446	July 30, 1878	1137	326	14	169
Grain-separator .....	A. J. Hartwell .....	207, 416	Aug. 27, 1878	813	240 241	14	321
Grain-separator .....	W. I. Harvey and H. S. Mitchell .....	209, 759	Nov. 12, 1878	252	75	14	719
Grain-separator .....	J. M., F. W., and C. V. Herman .....	202, 727	Apr. 23, 1878	950	272	13	743
Grain-separator .....	T. C. Histed .....	199, 204	Jan. 15, 1878	509	149 150	13	95
Grain-separator .....	A. J. Humphreys .....	208, 175	Sept. 17, 1878	646	190	14	440
Grain-separator .....	A. W. and C. T. Kendrick .....	198, 986	Jan. 8, 1878	275	79, 80	13	58
Grain-separator .....	N. Kibler .....	210, 333	Nov. 26, 1878	886	260	14	810
Grain-separator .....	M. P. Korsgaard .....	207, 042	Aug. 13, 1878	400	124	14	259
Grain-separator .....	J. L. Lowe .....	199, 300	Jan. 15, 1878	603	176	13	110
Grain-separator .....	L. Morgan .....	208, 237	Sept. 24, 1878	747	219	14	456
Grain-separator .....	M. H. Pitts .....	202, 863	Apr. 23, 1878	1099	315	13	762
Grain-separator .....	W. M. Redd and E. M. Sanford .....	203, 648	May 14, 1878	444	126	13	888
Grain-separator .....	R. B. Robertson .....	207, 985	Sept. 10, 1878	431	130	14	407
Grain-separator .....	R. A. Smith and G. Chase .....	209, 140	Oct. 22, 1878	775	225	14	608
Grain-separator .....	H. B. Stevens .....	199, 233	Jan. 15, 1878	533	157 158	13	99
Grain-separator .....	S. Stone .....	205, 150	June 18, 1878	775	229	13	1122
Grain-separator .....	S. Stone .....	206, 498	July 30, 1878	1196	343	14	175
Grain-separator .....	C. Stucke .....	201, 206	Mar. 12, 1878	385	119	13	480
Grain-separator .....	A. M. Sutherland .....	206, 982	Aug. 13, 1878	344	106	14	252
Grain-separator .....	A. T. Thayer .....	210, 372	Nov. 26, 1878	934	271	14	816
Grain-separator .....	A. Thomas .....	206, 506	July 30, 1878	1203	346	14	177
Grain-separator .....	I. Turman .....	205, 017	June 18, 1878	638	188	13	1104
Grain-separator .....	J. S. Upton .....	200, 585	Feb. 19, 1878	712	209 210	13	358
Grain-separator .....	C. M. Van Orman and J. M. Hag- enbaugh .....	209, 435	Oct. 29, 1878	1081	314	14	655
Grain-separator .....	H. E. Walker .....	210, 063	Nov. 19, 1878	582	174	14	766
Grain-separator .....	H. A. Webber .....	204, 778	June 11, 1878	371	111	13	1066
Grain-separator .....	C. Wood .....	203, 864	May 21, 1878	682	194	13	925
Grain-separator .....	J. Worick .....	201, 080	Mar. 5, 1878	258	81	13	454
Grain-separator .....	F. W. Young .....	207, 583	Aug. 27, 1878	1002	293	14	344
Grain-separators, Blast-regulator for .....	H. S. Stone .....	199, 594	Jan. 22, 1878	910	263 267	13	166
Grain-separators, Straw-elevator for .....	F. G. Shepard .....	199, 666	Jan. 29, 1878	1011	294	13	190
Grain-shelter .....	J. G. Nisbet and J. K. Vint .....	209, 772	Nov. 12, 1878	266	79	14	721
Grain-spout .....	J. Scholl .....	209, 362	Oct. 29, 1878	1006	292	14	643
Grain-spout register .....	J. Miller .....	207, 618	Sept. 3, 1878	33	11	14	353
Grain, Steaming and drying .....	A. De Bevoise and F. A. Lucken- bach .....	205, 606	July 2, 1878	146	44	14	28
Grain-toller .....	L. C. Erickson .....	199, 629	Jan. 29, 1878	975	283	13	184
Grain-ventilator .....	B. F. Elliott .....	206, 096	July 16, 1878	698	202	14	106
Graining .....	O. Sidmore .....	206, 625	July 30, 1878	1323		14	191
Graining-machine .....	G. Pelstring .....	204, 078	May 21, 1878	910	260	13	955
Graining-tool .....	E. H. Huffman .....	205, 094	June 18, 1878	716	213	13	1114
Grapple .....	A. L. Larwill .....	201, 427	Mar. 19, 1878	640	195	13	522
Grapple buckets, forks, and skids, Apparatus for working .....	W. D. and S. Priestman .....	203, 771	May 14, 1878	573	161	13	905
Grasses, Machine for exterminating noxious .....	L. Martin .....	203, 172	Apr. 30, 1878	1422	415	13	808
Grate .....	M. J. Bailey .....	210, 077	Nov. 19, 1878	601	179	14	768
Grate .....	G. De Cell and A. W. Jennings .....	200, 989	Mar. 5, 1878	163	53	13	440
Grate .....	F. M. Lawrence .....	206, 679	Aug. 6, 1878	24	7	14	210
Grate .....	D. Smith .....	210, 883	Dec. 17, 1878	554	155	14	913
Grate-bar .....	J. Ashcroft .....	208, 357	Sept. 24, 1878	848	248	14	469
Grate-bar .....	G. H. Clarke and C. Van Wag- enen .....	210, 499	Dec. 3, 1878	112	29	14	838



*Alphabetical list of inventions—Continued.*

Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	De'g.	Vol.	Page.
Grate-bar, Square revolving.	J. Ashcroft	208,356	Sept. 24, 1878	847	247	14	469
Grate, Basket	H. T. Simons	200,095	Feb. 5, 1878	266	64	13	265
Grate-bearing bar.	J. Bamrick	210,396	Dec. 3, 1878	7	2	14	825
Grate-extension	O. G. Parr	205,131	June 18, 1878	748	222	13	1118
Grate-fender	T. F. Wilson	202,084	Apr. 2, 1878	225	65	13	651
Grate for fire-places, &c.	J. Moore, jr	201,549	Mar. 19, 1878	762	232	13	539
Grate for open fire-places	F. N. Hart	206,445	July 30, 1878	1136	326	14	169
Grate-holder	R. J. Howdon and J. E. Wood	207,636	Aug. 13, 1878	396	122	14	259
Grate, Hot-air	A. H. Buckhout	208,069	Sept. 17, 1878	530	158	14	425
Grate, Shaking	O. P. Jackson	199,552	Jan. 22, 1878	866	253	13	169
Grate, Shaking	A. McDonald	208,109	Sept. 17, 1878	569	170	14	459
Grater	D. Block	204,791	June 11, 1878	387	115	13	1068
Grater, Nutmeg	S. Barker	200,423	Feb. 19, 1878	554	163	13	334
Grater, Nutmeg	C. H. Pierson and C. W. Ferguson	203,767	May 14, 1878	570	160	13	904
Grater, Nutmeg	J. Watkins and J. R. Carey	201,138	Mar. 12, 1878	324	99	13	470
Grating	T. F. Baker	207,476	Aug. 27, 1878	874	258	14	328
Grating, Cellar	D. B. Shirk	202,381	Apr. 16, 1878	568	166	13	687
Grave-shield and body-protector	S. S. Smick	209,932	Nov. 12, 1878	430	130	14	743
Graves, Coping and covering	C. H. Bassett	207,155	Aug. 20, 1878	528	159	14	279
Griddle, Cake	J. V. Taylor	207,459	Aug. 27, 1878	860	254	14	326
Griddle greaser and holder	M. Nichols	199,929	Feb. 5, 1878	42	13	13	239
Grinding and mixing pasty substances, Machine for.	A. Beyer	208,562	Oct. 1, 1878	107	31	14	563
Grinding-machine	A. E. Elmer	202,640	Apr. 23, 1878	865	248	13	733
Grinding-machine	J. Hunkeler	202,656	Apr. 23, 1878	882	253	13	735
Grinding-machine	F. G. Kreutzberger	203,741	May 14, 1878	541	153	13	901
Grinding-machine	L. Patterson	203,762	May 14, 1878	563	159	13	903
Grinding-machine	F. D. Randall and L. D. Dana	205,416	June 25, 1878	1066	315	13	1164
Grinding-machine	C. Riches	200,935	Mar. 5, 1878	112	38	13	433
Grinding-machine	S. Trethewey	204,393	May 28, 1878	1259	359	13	1063
Grinding-machine	A. Warth	202,899	Apr. 23, 1878	1138	327	13	767
Grinding-mill	D. J. and E. J. Ames	203,100	Apr. 30, 1878	1340	390	13	797
Grinding-mill	M. B. Atkinson	206,996	Aug. 13, 1878	358	110	14	254
Grinding-mill	W. N. Cosgrove	204,541	June 4, 1878	110	37	13	1023
Grinding-mill	S. T. Elting	203,126	Apr. 30, 1878	1368	398	13	801
Grinding-mill	S. T. Elting	203,127	Apr. 30, 1878	1369	399	13	801
Grinding-mill	E. Harrison	199,062	Jan. 8, 1878	350	103	13	71
Grinding-mill	D. Hess	200,722	Feb. 26, 1878	875	257	13	360
Grinding-mill	D. Hess	201,784	Mar. 26, 1878	1012	309	13	530
Grinding-mill	J. Mills	203,930	May 21, 1878	750	216	13	965
Grinding-mill	J. W. Price	203,645	May 14, 1878	440	125	13	883
Grinding-mill	S. C. Schofield	199,999	Feb. 5, 1878	106	35	13	250
Grinding-mill	B. L. Smith	202,063	Apr. 2, 1878	202	50	13	627
Grinding-mill	A. H. Wagner	205,322	June 25, 1878	968	287	13	1132
Grinding-mill	A. N. Wolf	204,121	May 21, 1878	954	273	13	960
Grinding-mill attachment	C. V. Stevens	206,905	Aug. 13, 1878	274	83	14	244
Grinding-mill, Feed	B. Brigham and D. E. Shaw	208,511	Oct. 1, 1878	55	17	14	497
Grinding-mill, Feed	G. Masterman	206,807	Aug. 6, 1878	152	48	14	225
Grinding-mill for hay, grain, &c.	G. B. Porter	209,981	Nov. 19, 1878	496	150	14	754
Grinding-mill, Vertical	C. C. Phillips	200,567	Feb. 19, 1878	693	204	13	356
Grinding-mill, Vertical-disk	D. Hess	210,936	Dec. 17, 1878	622	173	14	921
Grinding-mills, Bed-stone support for	F. G. Wallace	201,071	Mar. 5, 1878	249	79	13	433
Grindstone-frame	W. McDermott	209,280	Oct. 22, 1878	911	266	14	627
Grindstones, Harvester-knife attachment for	G. A. Whitney	199,674	Jan. 29, 1878	1020	297	13	191
Grocer's bin	R. K. Curtis	206,542	July 30, 1878	1236	355	14	181
Guano-distributor	D. Englar, jr	210,310	Nov. 26, 1878	859	252	14	807
Guano-distributor	J. P. Lowell	210,462	Dec. 3, 1878	76	19	14	834
Guano-drill feed attachment.	H. P. Musbaum	205,671	July 2, 1878	221	66	14	37
Guard:							
See Bedstead-guard.	Fish-guard.						
Buckle-guard.	Key-hole guard.						
Carriage-wheel guard.	Mustache-guard.						
Cattle-guard.	Railway cattle-guard.						
File-guard.	Vehicle-wheel sand-guard.						
Gum-box and spinning-toy combined	F. Sibley and J. Holmwood, jr	206,142	July 16, 1878	754	217	14	112
Gum, Accelerating	A. S. Lyman	200,740	Feb. 26, 1878	893	262	13	280
Gum, Air	B. T. Babbitt	209,014	Oct. 15, 1878	617	179	14	581
Gum, Air	W. Montstoun	210,976	Dec. 17, 1878	666	184	14	926
Gum-bands, Manufacture of	W. Baker	206,762	Aug. 6, 1878	105	34	14	29
Gun-barrels, Attaching the fore-end stock to	G. Hackett	210,523	Dec. 3, 1878	144	37, 38	14	84
Gun, Breech-loading	E. Pierce and S. Eggers	200,338	Feb. 12, 1878	459	135	13	311
Gun, Breech-loading	W. M. Scott and T. Baker	210,436	Dec. 3, 1878	47	11, 12	14	89
Gun carriage, Machine	D. C. Farrington	205,179	June 25, 1878	816	242	13	1181
Gun-cleaner	C. E. Longden	209,276	Oct. 22, 1878	908	264	14	627
Gun, Machine	F. L. Bailey	206,852	Aug. 13, 1878	215	69	14	257
Gun, Machine	E. A. Leland	199,915	Feb. 5, 1878	30	9	13	207
Gun, Machine	H. R. Leonard	207,747	Sept. 3, 1878	165	50, 51	14	370
Gun, Machine	A. H. McAllister	201,810	Mar. 26, 1878	1035	316	13	553
Gun, Machine	F. E. Schultze	208,203	Sept. 17, 1878	669	197	14	443
Gun, Machine	F. E. Schultze	208,204	Sept. 17, 1878	674	198	14	444
Gun, Machine	J. P. Taylor	206,365	July 23, 1878	1033	296	14	151
Gun, Magazine	T. G. Bennett	209,748	Nov. 12, 1878	241	72	14	717
Gun, Magazine	A. Burgess	210,182	Nov. 26, 1878	726	216	14	769
Gun, Magazine	A. Burgess	210,295	Nov. 26, 1878	845	449	14	804
Gun-rest	K. Müller	203,184	Apr. 30, 1878	1433	419	13	810
Gun-sight	P. P. Carnes	206,164	July 23, 1878	799	229	14	123
Gun-sight	H. Rowell	207,684	Sept. 3, 1878	100	30	14	361
Gun, Spring	W. H. Graves	208,810	Oct. 8, 1878	383	109	14	347
Gun, Spring air	C. Herzfeldt, jr	208,016	Sept. 17, 1878	477	143	14	410
Gun, Spring air	A. Pettengill	204,167	May 28, 1878	1027	292	13	973
Gun-stocks, Attaching fore-ends of	C. A. King	201,618	Mar. 26, 1878	851	258	13	555



*Alphabetical list of inventions—Continued.*

Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Gun-tool and whistle, Combined .....	A. E. Barthel .....	202, 136	Apr. 9, 1878	297	87	13	645
Gun-wiper .....	J. S. Birch .....	210, 235	Nov. 26, 1878	783	232	14	796
Guns, Rubber butt-plate for .....	W. H. Thornton and A. Beam .....	202, 606	Apr. 16, 1878	899	234	13	717
Gymnastic apparatus .....	J. S. Chamberlin .....	201, 328	Mar. 19, 1878	538	165	13	508
H.							
Hair-crimper .....	I. Kann .....	199, 979	Feb. 5, 1878	88	29	13	247
Hair-curling device .....	L. Barnham and D. G. Chase .....	199, 260	Jan. 15, 1878	561	164	13	103
Hair-pin .....	E. Kelly .....	209, 483	Oct. 29, 1878	1130	330	14	612
Hair-tonic .....	A. and T. Emig .....	209, 355	Oct. 22, 1878	977		14	639
Halter .....	S. S. Leland .....	205, 586	July 30, 1878	1286	370	14	187
Halter .....	T. Puller and G. W. Warren .....	204, 084	May 21, 1878	917	262	13	956
Halter, Safety .....	A. Henckell .....	200, 720	Feb. 20, 1878	874	257	13	390
Ham .....	J. J. Carpenter .....	207, 944	Sept. 10, 1878	389	117	14	401
Ham .....	H. E. Cosgrave .....	199, 033	Jan. 8, 1878	321	94	13	66
Ham .....	P. Hayden .....	207, 519	Aug. 27, 1878	923	272	14	334
Ham, &c .....	J. M. Lasater .....	200, 462	Feb. 19, 1878	590	174	13	340
Ham .....	J. H. Martin .....	208, 406	Sept. 24, 1878	896	262	14	475
Ham .....	A. P. Rose .....	202, 376	Apr. 16, 1878	565	165	13	686
Ham .....	B. C. Smith .....	205, 695	July 2, 1878	249	74	14	40
Ham-connection .....	C. B. Bristol .....	208, 288	Sept. 24, 1878	780	227	14	400
Ham-fastener .....	G. A. Boulter .....	209, 806	Nov. 12, 1878	363	108	14	733
Ham-fastener .....	J. Frank .....	210, 603	Dec. 10, 1878	245	67	14	865
Ham-fastener .....	D. Free .....	207, 729	Sept. 3, 1878	149	45	14	368
Ham-fastener .....	W. Moffatt .....	198, 951	Jan. 8, 1878	241	69	13	53
Ham-fastening .....	M. Calhoun .....	204, 712	June 11, 1878	299	92	13	1058
Ham-fastening .....	L. S. Flatau .....	203, 430	July 30, 1878	1122	321	14	167
Ham-fastening .....	G. M. Marks .....	205, 114	June 18, 1878	735	218	13	1117
Ham-strap loop .....	A. Ableiter .....	200, 886	Mar. 5, 1878	70	24	13	426
Hammer .....	E. F. Goodman .....	206, 394	July 30, 1878	1082	309	14	162
Hammer .....	H. Hammond .....	204, 665	June 11, 1878	249	78	13	1051
Hammer, Bush .....	J. Sullivan .....	201, 850	Mar. 26, 1878	1077	827	13	589
Hammer for charcoal-blooms, cast billets, &c .....	G. M. Dillon .....	203, 008	Apr. 30, 1878	1255	363	13	786
Hammer, Lasting .....	P. F. Peters .....	199, 568	Jan. 22, 1878	881	258	13	162
Hammer, meat pounder, and masher combined .....	M. V. Longworth and E. M. Tannehill .....	199, 838	Jan. 29, 1878	1173	344	13	215
Hammer, Power .....	C. W. Corr .....	206, 665	Aug. 6, 1878	7	3	14	208
Hammer, Power .....	M. Deering .....	208, 719	Oct. 8, 1878	281	80	14	534
Hammer, Steam .....	T. R. Morgan .....	207, 542	Aug. 27, 1878	950	{ 278 } 279	14	337
Hammers, Power mechanism for .....	B. Murphy .....	200, 748	Feb. 26, 1878	900	265	13	394
Hammock .....	E. F. Hanks .....	202, 814	Apr. 23, 1878	1047	301	13	756
Hammock .....	E. S. Sutton .....	203, 795	May 14, 1878	600	167	13	907
Hammock and shelter-tent, Portable .....	C. H. Lylester .....	209, 275	Oct. 22, 1878	907	264	14	627
Hammock-eye .....	T. Tresilian .....	206, 039	July 16, 1878	664	192	14	102
Hammock-support .....	G. Wheeler .....	201, 074	Mar. 5, 1878	252	79	13	453
Hammock-supporter, Folding .....	W. Howe .....	210, 037	Nov. 19, 1878	557	167	14	762
Hammocks, Swinging-frame for supporting .....	A. B. Holmes .....	198, 942	Jan. 8, 1878	233	66	13	51
Hamper .....	D. S. and L. W. Ludlum .....	198, 805	Jan. 1, 1878	87	24	13	21
Hams, Preparation of boned .....	A. Warner .....	209, 948	Nov. 12, 1878	446	135	14	744
Hams, Putting up boneless .....	T. Culver .....	202, 239	Apr. 9, 1878	405	118	13	660
Hand-drill .....	C. L. Bellamy .....	203, 402	May 7, 1878	173	50	13	844
Hand-drill .....	S. Morey .....	204, 990	June 18, 1878	614	180	13	1100
Hand-protector .....	H. C. and C. W. Davis .....	208, 799	Oct. 8, 1878	372	106	14	546
Hand-rake .....	J. Benedict .....	201, 320	Mar. 19, 1878	531	163	13	507
Hand-rake .....	W. M. White .....	200, 592	Feb. 19, 1878	719	211	13	359
Hand-rakes, Machine for constructing .....	N. B. Holcomb .....	203, 732	May 14, 1878	533	151	13	899
Hand-rakes, Tooth for .....	E. Quinlan .....	210, 356	Nov. 26, 1878	915	268	14	814
Hand-rest .....	G. C. Henning .....	209, 761	Nov. 12, 1878	254	76	14	719
Hand-washer .....	H. C. De Witt .....	207, 109	Aug. 20, 1878	486	146	14	274
Handcuff .....	J. J. Tower and H. W. Kahlke .....	200, 950	Mar. 5, 1878	127	42	13	435
Handle:							
See Auger-handle.	Pump-handle.						
Broom-handle.	Satchel-handle.						
Coffin-handle.	Shawl-strap handle.						
Crank-handle.	Shaw-handle.						
Fruit-box handle.	Soldering-iron handle.						
Knife and fork handle.	Stove-handle.						
Lifting-handle.	Tool-handle.						
Pistol-handle.	Traveling-bag handle.						
Hanger:							
See Eave-trough hanger.	Gate-hanger.						
Door-hanger.							
Harmonica .....	T. Meinhold .....	207, 616	Sept. 3, 1878	32	11	14	353
Harness .....	T. Boardman .....	200, 243	Feb. 12, 1878	356	106	13	296
Harness .....	E. R. Calhoun .....	204, 195	May 28, 1878	1063	303	13	978
Harness .....	C. I. Calvert .....	201, 745	Mar. 26, 1878	971	247	13	574
Harness .....	E. Jones .....	200, 399	Feb. 19, 1878	530	156	13	330
Harness .....	A. Rittenhouse .....	208, 636	Oct. 1, 1878	184	53	14	513
Harness .....	D. K. Wertman .....	207, 922	Sept. 10, 1878	365	111	10	398
Harness, Adjustable stiff crupper for .....	J. C. McCollum .....	199, 561	Jan. 22, 1878	874	256	13	161
Harness, Apparatus for suspending .....	J. P. Marquardt, jr., and W. H. Getzendaner .....	208, 477	Oct. 1, 1878	24	7	14	492
Harness attachment .....	T. B. Hand .....	203, 823	May 21, 1878	641	{ 180 } 181	13	920
Harness box-loop .....	W. G. Hull .....	203, 273	May 7, 1878	38	12	13	825
Harness, Breast-collar for .....	R. Patten .....	208, 115	Sept. 17, 1878	576	172	14	431
Harness, Double .....	A. B. Coleman .....	201, 809	Apr. 2, 1878	12	3	13	600
Harness-girth .....	C. M. Sanford .....	199, 318	Jan. 15, 1878	622	181	13	113
Harness-loop .....	C. B. Bristol .....	201, 989	Apr. 2, 1878	127	37	13	617
Harness-loop, Metallic .....	L. C. Quinby .....	208, 635	Oct. 1, 1878	184	53	14	513
Harness, Metal loop for .....	D. A. Johnson .....	203, 919	May 21, 1878	740	212	13	933
Harness, Neck-yoke attachment for .....	J. S. Nelson .....	208, 922	Oct. 15, 1878	516	150	14	569
Harness-pad .....	A. L. Johns .....	209, 403	Oct. 29, 1878	1045	304	14	649

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Harness-pad .....	H. R. Ridgley .....	199,225	Jan. 15, 1878	526	155	13	98
Harness-pad .....	J. T. Smith .....	202,879	Apr. 23, 1878	1116	321	13	764
Harness-pad .....	L. W. Vandenburg .....	202,490	Apr. 16, 1878	671	197	13	702
Harness-pad machine .....	J. F. Best .....	201,735	Mar. 26, 1878	962	294	13	572
Harness, Plow .....	J. W. Blyth .....	210,836	Dec. 17, 1878	493	139	14	966
Harness-rossette .....	B. A. Wilson .....	200,596	Nov. 5, 1878	62	18	14	689
Harness, Shaft-supporter for carriage .....	G. C. Eastman .....	199,148	Jan. 15, 1878	455	134	13	86
Harness-strap attaching device .....	F. Conway .....	199,266	Jan. 15, 1878	570	166	13	164
Harness to the shafts, Apparatus for attaching .....	M. H. M. Smith .....	200,486	Feb. 19, 1878	614	181	13	343
Harness-tree .....	J. H. Martin .....	206,594	July 30, 1878	1294	372	14	188
Harness-trimming .....	M. E. Zoller .....	207,791	Sept. 3, 1878	209	64	14	375
Harpoon .....	W. Taylor .....	206,694	Aug. 6, 1878	39	11, 12	14	211
Harrow .....	A. H. Ballagh .....	199,012	Jan. 8, 1878	303	89	13	63
Harrow .....	J. H. Barr .....	202,780	Apr. 23, 1878	1008	289	13	751
Harrow .....	S. Beckner .....	206,922	Aug. 13, 1878	289	88	14	245
Harrow .....	L. Brown .....	203,585	May 14, 1878	385	109	13	881
Harrow .....	C. Buswell .....	203,705	May 14, 1878	504	143	13	806
Harrow .....	J. A. Davis, W. D. Guseman, and H. D. McGeorge .....	203,248	May 7, 1878	11	5	13	822
Harrow .....	M. M. Dobbin .....	199,421	Jan. 22, 1878	733	215	13	138
Harrow .....	E. M. Dunbar .....	211,003	Dec. 17, 1878	700	193	14	689
Harrow .....	S. Elliott .....	207,725	Sept. 3, 1878	144	43	14	307
Harrow .....	A. F. French .....	210,682	Dec. 10, 1878	328	89	14	875
Harrow .....	L. F. Haas .....	199,287	Jan. 15, 1878	589	172	13	167
Harrow .....	T. A. Hansley .....	210,525	Dec. 3, 1878	147	38	14	232
Harrow .....	J. Johnson .....	207,039	Aug. 13, 1878	368	123	14	259
Harrow .....	J. Lennon .....	198,920	Jan. 1, 1878	204	58	13	40
Harrow .....	S. C. Matteson .....	210,702	Dec. 10, 1878	845	95	14	877
Harrow .....	J. K. Miller .....	201,435	Mar. 19, 1878	646	197	13	523
Harrow .....	E. Murray .....	204,501	June 4, 1878	76	26	13	1023
Harrow .....	L. Norton .....	199,988	Feb. 5, 1878	96	32	13	248
Harrow .....	J. W. Pearson .....	201,554	Mar. 19, 1878	767	233	13	549
Harrow .....	J. Pentbreath and J. Q. Crosby .....	205,410	June 25, 1878	1059	314	13	1164
Harrow .....	G. H. Perkins .....	202,509	Oct. 29, 1878	1158	337	14	665
Harrow .....	J. A. Platt .....	206,039	July 16, 1878	641	186	14	89
Harrow .....	D. C. Reed .....	201,940	Apr. 2, 1878	83	24	13	611
Harrow .....	D. Rhodes .....	199,995	Feb. 5, 1878	102	34	13	249
Harrow .....	G. W. Ross .....	206,750	Aug. 6, 1878	93	30	14	218
Harrow .....	F. Schamburg .....	206,490	July 30, 1878	1187	341	14	174
Harrow .....	R. M. Skinner .....	202,671	Apr. 23, 1878	898	257	13	735
Harrow .....	S. B. Smith and A. B. McCulley .....	201,363	Mar. 19, 1878	575	177	13	513
Harrow .....	G. M. Titus .....	200,109	Feb. 5, 1878	220	68	13	297
Harrow .....	C. B. Tompkins .....	209,945	Nov. 12, 1878	444	134	14	744
Harrow .....	E. Vandawater .....	208,129	Sept. 17, 1878	594	176	14	453
Harrow .....	H. F. Wasmund .....	204,268	May 28, 1878	1131	324	13	986
Harrow .....	G. Watt, sr. .....	202,903	Apr. 23, 1878	1143	328	13	707
Harrow .....	A. H. and M. S. Whiteside .....	206,284	July 23, 1878	937	265	14	140
Harrow and clod-crusher combined .....	J. W. Haggard .....	199,995	Feb. 5, 1878	14	5	13	235
Harrow and cultivator combined .....	A. Lee .....	203,053	Apr. 30, 1878	1297	376	13	792
Harrow and cultivator, Combined .....	A. McCulley .....	209,823	Nov. 12, 1878	315	94	14	727
Harrow and cultivator, Rotary .....	S. Smith .....	210,437	Dec. 3, 1878	49	12	14	899
Harrow and roller combined .....	W. M. Stehley .....	199,755	Jan. 29, 1878	1091	320	13	202
Harrow and seeding-machine combined .....	G. W. and H. F. Roberson .....	202,873	Apr. 23, 1878	1110	319	13	704
Harrow and seeding-machine combined, Wheeled .....	J. S. Foster .....	207,025	Aug. 13, 1878	386	119	14	257
Harrow and weed-cutter .....	J. W. Fees .....	202,098	Apr. 9, 1878	257	75	13	640
Harrow, Farm .....	P. McDonald .....	210,046	Nov. 19, 1878	564	169	14	764
Harrow, Gang .....	E. and J. M. Ruddick .....	205,309	July 9, 1878	495	141	14	75
Harrow, Revolving .....	C. Busack .....	200,127	Feb. 12, 1878	246	74	13	280
Harrow, Rotary .....	S. Hartman .....	200,656	Feb. 26, 1878	808	238	13	301
Harrow, Rotary .....	S. Hartman .....	207,657	Sept. 3, 1878	76	23	14	359
Harrow, Rotary .....	E. and E. H. McNiel .....	204,354	May 28, 1878	1221	348	13	998
Harrow, Sectional .....	I. T. Evans .....	210,311	Nov. 26, 1878	860	252	14	807
Harrow, Sully .....	S. C. Dix .....	209,028	Oct. 15, 1878	632	183	14	584
Harrow-tooth .....	D. L. Garver .....	199,430	Jan. 22, 1878	740	217	13	140
Harrow-tooth .....	D. Waterbury and F. Miller .....	205,449	June 25, 1878	1098	325	13	1169
Harrow-tooth fastening .....	J. H. and T. K. Barley .....	205,520	July 2, 1878	59	17	14	16
Harrow, Wheel .....	F. Bramer .....	205,608	July 2, 1878	148	45	14	28
Harrow, Wheel .....	F. Bramer .....	206,218	July 23, 1878	859	245	14	139
Harrow, Wheel .....	F. Bramer .....	204,793	June 11, 1878	388	115	13	1068
Harvester .....	C. Ainsworth .....	209,639	Nov. 5, 1878	114	33	14	606
Harvester .....	J. Bordwell .....	205,235	June 25, 1878	877	259	13	1140
Harvester .....	T. S. Brown .....	206,857	Aug. 13, 1878	219	70, 71	14	238
Harvester .....	R. Campbell .....	208,461	Oct. 1, 1878	9	2, 3	14	450
Harvester .....	R. Conarroe .....	204,424	June 4, 1878	9	4	13	1014
Harvester .....	O. Cooley, M. M. Oliver, and S. E. Sherwood .....	206,425	July 30, 1878	1116	320	14	106
Harvester .....	J. Dusch and H. Lewis .....	201,759	Mar. 26, 1878	985	301	13	576
Harvester .....	R. Emerson .....	209,705	Feb. 26, 1878	857	252	13	388
Harvester .....	N. B. Fassett .....	202,802	Apr. 23, 1878	1028	295	13	753
Harvester .....	W. H. Foye .....	208,804	Oct. 8, 1878	377	107	14	546
Harvester .....	W. Gangwer .....	203,000	May 14, 1878	405	115	13	884
Harvester .....	J. Garrard .....	206,102	July 16, 1878	704	203	14	107
Harvester .....	J. Harris .....	200,288	Feb. 12, 1878	403	120	13	303
Harvester .....	S. Hevener .....	200,532	Feb. 19, 1878	659	194	13	359
Harvester .....	H. Kelly .....	202,269	Apr. 9, 1878	434	127	13	664
Harvester .....	C. W. Levalley .....	202,036	Apr. 2, 1878	178	51	13	634
Harvester .....	S. D. Maddin .....	203,352	May 7, 1878	120	35	13	836
Harvester .....	C. McGregory .....	207,128	Aug. 20, 1878	504	152	14	276
Harvester .....	J. S. Royce .....	204,613	June 4, 1878	188	60, 61	13	1009
Harvester .....	J. S. Royce .....	204,614	June 4, 1878	194	62	13	1040
Harvester .....	J. M. Rothrauff .....	205,423	June 25, 1878	1072	317	13	1165
Harvester .....	D. Sager .....	207,554	Aug. 27, 1878	962	282	14	399

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Harvester .....	N. J. Titus .....	206, 368	July 23, 1878	1039	{ 298 242	14	152
Harvester .....	C. Wheeler, jr. ....	201, 579	Mar. 19, 1878	794	{ 243 243	13	543
Harvester .....	C. Whitney .....	205, 323	June 25, 1878	971	{ 288 322	13	1152
Harvester and husker, Corn .....	F. J. Randall .....	201, 830	Mar. 26, 1878	1056	{ 83 22, 23	13	586
Harvester and thrasher .....	J. Hay .....	198, 801	Jan. 1, 1878	83	{ 136 137	13	21
Harvester, Corn .....	C. K. Conner .....	208, 005	Sept. 10, 1878	453	{ 309 310	14	410
Harvester, Corn .....	G. A. Harvey .....	206, 395	July 30, 1878	1083	{ 131 132	14	162
Harvester, Corn .....	S. and M. Ruthenburg .....	199, 108	Jan. 15, 1878	473	{ 182 183	13	90
Harvester, Corn .....	J. Stewart and J. W. Jones .....	210, 818	Dec. 10, 1878	468	{ 142 143	14	893
Harvester, Cotton .....	I. Boone .....	201, 384	Mar. 19, 1878	594	{ 142 143	13	516
Harvester, Cotton .....	J. Tripp .....	200, 362	Feb. 12, 1878	484	{ 312 312	13	315
Harvester cut-off .....	A. L. and E. C. Long .....	199, 727	Jan. 29, 1878	1067	{ 125 41	13	198
Harvester-cutter .....	A. J. Bigelow .....	200, 021	Feb. 5, 1878	125	{ 91 91	13	253
Harvester-cutter .....	J. Smythe .....	205, 706	July 9, 1878	841	{ 212 212	14	55
Harvester-cutter and guard-finger .....	D. L. Grover and A. S. Beach .....	208, 236	Sept. 24, 1878	722	{ 689 202	14	453
Harvester cutter-bar .....	M. G. Bell .....	202, 510	Apr. 16, 1878	689	{ 866 253	13	705
Harvester cutter-bar .....	R. W. Bliff .....	199, 551	Jan. 22, 1878	866	{ 808 234	13	159
Harvester cutter-bar .....	E. C. Keys .....	209, 172	Oct. 22, 1878	808	{ 416 69	14	612
Harvester cutter-bar .....	J. McCormick .....	203, 175	Apr. 30, 1878	1426	{ 163 163	13	809
Harvester cutter-bar .....	E. R. Whitney .....	200, 114	Feb. 5, 1878	226	{ 714 212	13	267
Harvester cutting apparatus .....	T. H. Eulass .....	207, 169	Aug. 20, 1878	543	{ 88 282	14	281
Harvester cutting apparatus .....	C. F. Howes .....	205, 092	June 18, 1878	714	{ 1006 286	13	1114
Harvester-dropper .....	W. H. Akens .....	204, 698	June 11, 1878	282	{ 180 140	13	1055
Harvester-gearing .....	J. Harris .....	204, 148	May 28, 1878	1006	{ 323 323	13	970
Harvester guard-finger .....	T. W. Ballew and C. A. Fuller .....	208, 141	Sept. 17, 1878	607	{ 150 45	14	435
Harvester guard-finger .....	A. J. Curtis .....	209, 465	Oct. 29, 1878	1111	{ 155 45	14	659
Harvester guard-finger .....	H. R. Fuller .....	207, 730	Sept. 3, 1878	150	{ 454 131	14	368
Harvester guard-finger .....	D. L. Grover .....	209, 675	Nov. 5, 1878	155	{ 1000 291	14	701
Harvester guard-finger .....	W. H. Wright .....	208, 874	Oct. 8, 1878	454	{ 531 159	14	557
Harvester, Hand-binding .....	J. P. Manll .....	199, 655	Jan. 29, 1878	1000	{ 160 160	13	188
Harvester-knife sharpener .....	J. M. Connel .....	210, 011	Nov. 19, 1878	531	{ 1090 323	14	759
Harvester-platform .....	G. Sweet .....	205, 441	June 25, 1878	1090	{ 102 34, 35	13	1168
Harvester, Potato .....	D. F. Brown .....	204, 531	June 4, 1878	102	{ 546 160	13	1927
Harvester-rake .....	J. Barnes .....	208, 950	Oct. 15, 1878	546	{ 968 282	14	573
Harvester-rake .....	S. C. Cobb .....	209, 327	Oct. 29, 1878	968	{ 813 241	13	638
Harvester-rake .....	O. Cooley .....	205, 175	June 25, 1878	813	{ 423 122	13	1132
Harvester-rake .....	J. H. Lewis .....	203, 630	May 14, 1878	423	{ 402 120	13	886
Harvester-rake .....	A. A. Miller .....	209, 909	Nov. 12, 1878	402	{ 415 128	14	739
Harvester-reel .....	C. E. Fahrney .....	201, 231	Mar. 12, 1878	415	{ 654 189	13	484
Harvester-reel .....	A. J. Hodges and J. B. Mohler .....	209, 047	Oct. 15, 1878	654	{ 944 278	14	587
Harvester-reel .....	L. J. McCormick and W. R. Baker .....	200, 796	Feb. 26, 1878	944	{ 138 43	13	401
Harvester-reel adjustment .....	A. J. Hodges and J. B. Mohler .....	206, 788	Aug. 6, 1878	138	{ 83 28	14	223
Harvester safety attachment .....	A. J. Spaulding and J. R. Hibbs .....	204, 509	June 4, 1878	83	{ 130 38	13	1024
Harvester-thrasher .....	W. T. Carter .....	209, 652	Nov. 5, 1878	130	{ 1117 326	14	698
Harvesters, Grain-lifter for .....	G. A. Guttermann .....	209, 473	Oct. 29, 1878	1117	{ 554 158	14	690
Harvesters, Sheaf-carrier for .....	F. M. Yeager .....	205, 951	July 16, 1878	554	{ 232 73	13	88
Harvesting-machines, Manufacturing the fingers of .....	B. Samuelson and W. G. Manwaring .....	201, 052	Mar. 5, 1878	232	{ 373 111	13	450
Hasp-lock .....	T. V. Allis .....	204, 779	June 11, 1878	373	{ 548 156	13	1066
Hasp-lock .....	C. Collins, jr., and G. Thomas .....	205, 947	July 16, 1878	548	{ 20 5	13	87
Hasp-lock .....	C. Fichter .....	201, 877	Apr. 2, 1878	20	{ 138 39	13	601
Hasp-lock .....	W. D. Spencer .....	198, 859	Jan. 1, 1878	138	{ 383 112	13	30
Hat .....	W. A. Bate .....	202, 217	Apr. 9, 1878	383	{ 507 149	13	657
Hat .....	E. Copeleston .....	200, 374	Feb. 19, 1878	507	{ 865 254	14	327
Hat .....	H. Friend .....	210, 315	Nov. 26, 1878	865	{ 259 77	14	807
Hat .....	W. C. Waring, jr. ....	205, 706	July 2, 1878	259	{ 53 13	14	41
Hat .....	W. Wetzel .....	210, 441	Dec. 3, 1878	53	{ 950 280	13	831
Hat and bonnet box .....	A. B. Rice .....	200, 802	Feb. 26, 1878	950	{ 142 41	13	402
Hat and cap .....	M. Davis and S. Simonson .....	202, 005	Apr. 2, 1878	142	{ 1469 430	13	619
Hat and cap .....	J. Van Gelder .....	203, 220	Apr. 30, 1878	1469	{ 1127 322	13	814
Hat and cap sweat .....	J. R. Terry, jr. ....	204, 262	May 28, 1878	1127	{ 420 116	13	986
Hat-block, Elastic .....	R. Eickemeyer .....	210, 771	Dec. 10, 1878	420	{ 138 45, 46	13	887
Hat blocking and banding machine .....	R. Eickemeyer .....	200, 034	Feb. 5, 1878	138	{ 148 42, 43	13	255
Hat-bodies, Attaching sweat-leathers to .....	J. Bigelow .....	198, 868	Jan. 1, 1878	148	{ 386 108	13	32
Hat-bodies, Felting .....	C. Froggatt .....	208, 806	Oct. 8, 1878	386	{ 419 116	14	547
Hat-bodies, Pinning-out stretcher for .....	R. Eickemeyer .....	210, 770	Dec. 10, 1878	419	{ 168 49, 50	14	887
Hat-box .....	F. Jinkins .....	209, 691	Nov. 5, 1878	168	{ 221 70	13	703
Hat-brim .....	E. Woolley .....	204, 646	June 4, 1878	221	{ 136 41	13	1043
Hat-brims, Block for forming .....	C. H. White .....	205, 597	July 2, 1878	136	{ 323 99	14	27
Hat-brims, Curling .....	A. B. Waring .....	201, 137	Mar. 12, 1878	323	{ 564 173	13	470
Hat-brims, Machine for curling .....	T. Lees .....	201, 351	Mar. 19, 1878	564	{ 816 242	14	511
Hat, Decorated felt .....	W. R. Rice .....	210, 269	Nov. 26, 1878	816	{ 623 180	14	801
Hat-elastic fastening .....	M. K. Holt .....	206, 021	July 16, 1878	623	{ 636 187	13	97
Hat-fastener .....	F. L. Tripp .....	205, 014	June 18, 1878	636	{ 618 181	13	1103
Hat-finishing machine .....	S. Piron .....	204, 994	June 18, 1878	618	{ 976 289	13	1101
Hat-finishing machine .....	E. Woolley .....	205, 326	June 25, 1878	976	{ 854 251	13	1153
Hat, Fireman's .....	J. M. De Célis .....	200, 701	Feb. 26, 1878	854	{ 749 223	14	387
Hat, Folding .....	J. A. Harrington .....	207, 353	Aug. 27, 1878	749	{ 89 30	13	313
Hat-folding device .....	A. C. Fuller .....	200, 906	Mar. 5, 1878	89	{ 88 26	14	429
Hat-forming machines, Feeder for .....	P. Starr .....	208, 545	Oct. 1, 1878	88	{ 357 106	13	501
Hat-holder .....	F. Bobbitt .....	200, 244	Feb. 12, 1878	357	{ 846 249	13	296
Hat-holder .....	J. M. Castillo .....	200, 695	Feb. 26, 1878	846	{ 141 43	14	386
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Hat pouncing and finishing machines, Hat-block and spindle for.	C. W. Glover .....	206, 171	July 23, 1878	807	230	14	123
Hat-pouncing machine .....	R. Eickemeyer .....	202, 529	Apr. 16, 1878	721	210	13	707
Hat-pouncing machine .....	W. Keenan .....	202, 829	Apr. 23, 1878	1066	305	13	758
Hat-pouncing machine .....	W. Keenan .....	208, 179	Sept. 17, 1878	650	191	14	440
Hat-pouncing machine .....	E. B. Taylor .....	205, 009	June 18, 1878	631	185 186	13	1102
Hat-pouncing machine .....	E. B. Whiting and F. E. Daum .....	204, 931	June 18, 1878	558	162	13	1092
Hat-pouncing machine .....	G. Yule .....	200, 118	Feb. 5, 1878	229	70	13	208
Hat-pressing machine .....	A. Algeo .....	202, 623	Apr. 23, 1878	845	243	13	731
Hat-pressing machine .....	A. C. Fuller .....	200, 905	Mar. 5, 1878	87	30	13	428
Hat, shade, &c. ....	M. Affel .....	209, 788	Nov. 12, 1878	284	84	14	723
Hat-shaving machine .....	R. Eickemeyer .....	210, 509	Dec. 3, 1878	125	33	14	840
Hat-stretching machine .....	R. Eickemeyer .....	206, 168	July 23, 1878	802	230	14	122
Hat-tip .....	F. W. Torwogge .....	209, 306	Oct. 22, 1878	935	273	14	630
Hats and caps from straw braid, Manufacture of.	C. O. Parmenter .....	205, 130	June 18, 1878	747	222	13	1118
Hats and caps, Machine for producing brims on sweat-bands for.	T. W. Bracher .....	210, 985	Dec. 17, 1878	679	187	14	927
Hats and caps, Sweat-band for .....	T. W. Bracher .....	206, 296	July 23, 1878	948	268	14	141
Hats and caps, Sweat-band for .....	T. W. Bracher .....	210, 489	Dec. 3, 1878	99	25, 26	14	837
Hats and caps, Sweat-leather for .....	W. J. Van Horne .....	201, 575	Mar. 19, 1878	791	240	13	543
Hats, Manufacture of .....	G. H. Dimond .....	203, 603	May 14, 1878	400	113	13	833
Hats, &c., Manufacturing felt for .....	W. R. Rice .....	210, 270	Nov. 26, 1878	817	242	14	801
Hats, Process and machine for stretching .....	R. Eickemeyer .....	198, 876	Jan. 1, 1878	156	45	13	33
Hats, Sweat-band for .....	J. W. Corey and H. Charnbury .....	209, 865	Nov. 12, 1878	361	108	14	733
Hats, Sweat-leather for .....	J. Bigelow .....	198, 867	Jan. 1, 1878	146	42	13	31
Hats, Sweat-leather for .....	J. C. Budd .....	193, 258	Jan. 15, 1878	557	164	13	103
Hats, Sweat-leather for .....	G. H. Dimond .....	200, 872	Nov. 12, 1878	369	110	14	734
Hatch for street-elevators .....	P. Hinkle .....	204, 821	June 11, 1878	416	122 123	13	1071
Hatchet .....	J. C. Chapman .....	199, 959	Feb. 5, 1878	69	22	13	244
Hatchway .....	L. Paré .....	201, 356	Mar. 19, 1878	568	174 175	13	512
Hatchway .....	I. H. Philips .....	206, 608	July 30, 1878	1310	376 377	14	190
Hatchway .....	J. M. Van Osdel .....	207, 571	Aug. 27, 1878	980	288	14	341
Hatchway .....	J. M. Van Osdel .....	207, 572	Aug. 27, 1878	985	289	14	342
Hatchway .....	J. M. Van Osdel .....	207, 573	Aug. 27, 1878	988	289	14	342
Hatchway and door, Sidewalk .....	P. H. Jackson .....	203, 343	May 7, 1878	111	32	13	835
Hatchway-door .....	J. C. Richardson .....	209, 586	Nov. 5, 1878	49	14	14	687
Hatchway-door mechanism .....	R. F. Bancroft and J. I. Ashmore .....	205, 605	July 2, 1878	145	44	14	28
Hatchway-door mechanism .....	T. J. Close .....	210, 838	Dec. 17, 1878	494	140	14	906
Hatchway-door mechanism .....	W. Stevens .....	206, 842	Aug. 6, 1878	190	60	14	230
Hatchway-door mechanism .....	C. O. Yale .....	205, 940	July 9, 1878	527	151	14	79
Hatchway-doors, Device for opening and closing .....	J. J. Lacey .....	205, 192	June 25, 1878	832	247	13	1134
Hatchway, Elevator .....	J. A. Marker .....	204, 062	May 21, 1878	894	256	13	953
Haversack .....	J. H. Lambert .....	201, 537	Mar. 19, 1878	750	228	13	538
Hay and cotton press .....	M. Lahaussois .....	202, 835	Apr. 23, 1878	1071	306	13	758
Hay and cotton press, Portable .....	A. A. Gehrt .....	199, 052	Jan. 8, 1878	339	100	13	69
Hay-carrier .....	E. A. Walters .....	206, 967	Aug. 13, 1878	948	107	14	253
Hay-cutter .....	J. Weichhart .....	199, 882	Jan. 29, 1878	1211	356	13	229
Hay-drag .....	I. Killian .....	206, 799	Aug. 6, 1878	147	46	14	225
Hay-elevator .....	J. W. Higgs .....	210, 255	Nov. 26, 1878	801	238	14	769
Hay-elevator .....	C. M. Mallory .....	200, 465	Feb. 19, 1878	594	175	13	341
Hay-elevator .....	G. Miller .....	200, 703	Nov. 5, 1878	181	53	14	705
Hay-elevator and carrier .....	W. F. Goddard .....	206, 104	July 16, 1878	707	204	14	107
Hay elevator and unloader .....	A. H. McKittrick .....	202, 445	Apr. 16, 1878	637	186	13	697
Hay-fork and pruning-shears, Combined .....	B. C. Chambers .....	208, 462	Oct. 1, 1878	10	3	14	490
Hay-fork, Horse .....	S. Chapman .....	198, 702	Jan. 1, 1878	40	10	13	14
Hay-fork, Horse .....	A. Frank .....	207, 893	Sept. 10, 1878	299	91	14	399
Hay-fork, Horse .....	J. H. Harter .....	204, 035	May 21, 1878	868	248	13	949
Hay-fork, Horse .....	B. Jackson .....	210, 458	Dec. 3, 1878	72	18	14	833
Hay-fork, Horse .....	R. N. B. Kirkham .....	205, 276	June 25, 1878	916	271	13	1145
Hay-fork, Horse .....	L. W. Noyes .....	199, 378	Jan. 22, 1878	690	203	13	131
Hay-fork, Horse .....	H. H. Welsh and J. C. Schwenck .....	210, 174	Nov. 19, 1878	701	209	14	782
Hay-knife .....	D. L. Garver .....	204, 020	May 21, 1878	852	244	13	947
Hay-knife .....	H. O. Turner .....	202, 487	Apr. 16, 1878	668	196	13	702
Hay-loader .....	H. E. Evans .....	203, 254	May 7, 1878	18	7	13	823
Hay-loader .....	G. L. Johnson .....	206, 023	July 16, 1878	624	181	14	97
Hay-loader .....	J. B. Martin and W. T. Carothers .....	209, 410	Oct. 29, 1878	1051	306	14	650
Hay loader and stacker .....	P. F. Fleming, E. Wayland, and S. B. Gilliland .....	203, 332	May 7, 1878	101	29	14	833
Hay-meal, Machine for making .....	J. S. Kirk .....	208, 826	Oct. 8, 1878	397	113	14	549
Hay-press .....	F. B. Boalt .....	199, 021	Jan. 8, 1878	310	91	13	64
Hay-press .....	I. R. Kulp .....	208, 525	Oct. 1, 1878	71	21	14	498
Hay-press .....	I. R. Kulp .....	208, 526	Oct. 1, 1878	71	21	14	498
Hay-press .....	I. R. Kulp .....	210, 542	Dec. 3, 1878	165	43	14	845
Hay-press .....	J. Price .....	204, 757	June 11, 1878	346	105	13	1064
Hay-press .....	H. R. Smith .....	203, 086	Apr. 30, 1878	1830	387	13	796
Hay-rack .....	N. B. Cooper .....	199, 186	Jan. 15, 1878	493	145	13	93
Hay-rack .....	J. B. Hoffman .....	203, 347	Apr. 16, 1878	535	156 157	13	683
Hay-rack .....	C. Stevenson .....	207, 219	Aug. 20, 1878	594	179	14	288
Hay-rake .....	A. Rigby .....	204, 090	May 21, 1878	924	264	13	956
Hay-rake and baling-press .....	R. B. and P. Wright .....	205, 026	June 18, 1878	646	191	13	1105
Hay rake and loader .....	W. W. Dean .....	199, 805	Jan. 29, 1878	1144	336	13	210
Hay rake and loader .....	E. G. Hastings .....	204, 567	June 4, 1878	134	45	13	1052
Hay-rake, Hand .....	D. J. Starrett .....	201, 365	Mar. 19, 1878	576	177	13	513
Hay-rake, Horse .....	W. Aldrich .....	199, 487	Jan. 22, 1878	795	233	13	148
Hay-rake, Horse .....	W. Adriance .....	199, 486	Jan. 22, 1878	794	233	13	148
Hay-rake, Horse .....	W. Adriance .....	209, 004	Oct. 15, 1878	602	175	14	580
Hay-rake, Horse .....	M. C. Burr .....	190, 143	Jan. 15, 1878	449	132 133	13	86
Hay-rake, Horse .....	D. A. Calkins .....	210, 093	Nov. 19, 1878	617	183 184	14	771



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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Hay-rake, Horse .....	W. P. and C. E. Clark .....	207,392	Aug. 27, 1878	785	{ 233 234	{ 14	317
Hay-rake, Horse .....	J. Deuel .....	203,601	May 14, 1878	399	113	13	883
Hay-rake, Horse .....	W. H. Field .....	208,728	Oct. 8, 1878	291	83	14	535
Hay-rake, Horse .....	D. F. Hacker .....	210,026	Nov. 19, 1878	545	163	14	761
Hay-rake, Horse .....	W. H. Hall .....	205,545	July 2, 1878	86	24	14	20
Hay-rake, Horse .....	J. Hause .....	209,564	Nov. 5, 1878	32	9	14	685
Hay-rake, Horse .....	J. C. Holton .....	199,440	Jan. 22, 1878	749	220	13	141
Hay-rake, Horse .....	W. B. Jackson .....	202,173	Apr. 9, 1878	341	99	13	651
Hay-rake, Horse .....	A. C. Kaiser .....	210,859	Dec. 17, 1878	520	147	14	909
Hay-rake, Horse .....	E. Knapp .....	202,833	Apr. 23, 1878	1069	306	13	758
Hay-rake, Horse .....	O. M. Laraway and G. S. King .....	207,811	Sept. 10, 1878	242	76	14	383
Hay-rake, Horse .....	T. C. Lord .....	199,077	Jan. 8, 1878	362	107	13	73
Hay-rake, Horse .....	A. J. Manny .....	205,884	July 9, 1878	467	133	14	72
Hay-rake, Horse .....	T. S. Miller .....	206,959	Aug. 13, 1878	322	98	14	249
Hay-rake, Horse .....	S. H. Powers .....	199,103	Jan. 8, 1878	387	116	13	77
Hay-rake, Horse .....	W. Reno .....	199,994	Feb. 5, 1878	102	33	13	249
Hay-rake, Horse .....	E. D. and O. B. Reynolds .....	201,833	Mar. 26, 1878	1061	323	13	587
Hay-rake, Horse .....	S. Ritty .....	202,871	Apr. 23, 1878	1108	318	13	763
Hay-rake, Horse .....	W. M. Saunders .....	207,986	Sept. 10, 1878	432	130	14	407
Hay-rake, Horse .....	D. P. Sharp .....	209,928	Nov. 12, 1878	427	129	14	742
Hay-rake, Horse .....	J. J. Squire .....	207,217	Aug. 20, 1878	593	178	14	288
Hay-rake, Horse .....	A. Tschoep .....	199,239	Jan. 15, 1878	538	159	13	100
Hay-rake, Horse .....	G. R. Williams .....	207,927	Sept. 10, 1878	369	{ 112 113	{ 14	399
Hay-rake, Revolving horse .....	J. H. Randolph, jr .....	208,267	Sept. 24, 1878	759	222	14	457
Hay raker and loader .....	D. W. Bovee .....	209,156	Oct. 22, 1878	791	229	14	610
Hay raker and stacker .....	R. B. Eubank, jr .....	200,875	Nov. 12, 1878	372	112	14	735
Hay-ricker, Portable .....	G. W. Fawks .....	205,790	July 9, 1878	368	106	14	59
Hay-tedder .....	E. W. Bullard .....	207,010	Aug. 13, 1878	372	114	14	256
Hay-tedder .....	J. M. Hill .....	205,384	June 25, 1878	1035	307	13	1160
Hay-tedder .....	S. Perry .....	204,080	May 21, 1878	912	261	13	955
Hay-tedder .....	W. M. Saunders .....	207,074	Aug. 13, 1878	431	133	14	263
Hay-tedder .....	J. A. Sellen .....	204,622	June 4, 1878	201	64	13	1041
Head-elevator and chin-raiser .....	J. Heintz .....	205,086	June 18, 1878	709	210	13	1113
Head-light, Locomotive .....	C. Byrne .....	202,227	Apr. 9, 1878	392	115	13	658
Head-light, Locomotive .....	A. Dressell, E. H. and J. G. Voth .....	202,711	Apr. 23, 1878	937	268	13	741
Head-light, Locomotive .....	E. L. Hall .....	209,041	Oct. 15, 1878	645	187	14	586
Head-light, Locomotive .....	J. Kirby, jr .....	204,580	June 4, 1878	449	49, 50	13	1034
Head-light, Locomotive .....	L. A. Wood .....	208,553	Oct. 1, 1878	95	28	14	502
Head-light, Signal .....	A. Dressell, E. H. and J. G. Voth .....	210,412	Dec. 3, 1878	25	5	14	827
Head-light, Signal .....	W. Forsyth .....	210,313	Nov. 26, 1878	863	253	14	807
Head-lights, Signal for locomotive .....	W. Kelly .....	207,284	Aug. 20, 1878	664	197	14	296
Head-lights, Signal for locomotive .....	W. Kelly .....	209,405	Oct. 29, 1878	1146	304	14	650
Heat-protector for firemen, shipwrecked persons, &c. ....	F. P. Cummerford .....	204,204	May 28, 1878	1071	305	13	979
Heat by hydrocarbon-vapor blast on heated metallic salts ponce, and mode of preparing the heating-case, Producing and maintaining a high degree of. ....	M. G. Parker .....	205,760	July 9, 1878	335	97	14	55
Heater:							
See Air-heater. Meal-heater.							
Car-heater. Portable heater.							
Car and coach-heater. Sad-iron heater.							
Feed-water heater. Tubular heater.							
Flat-iron heater. Water-heater.							
Hot-water heater. Wheat-heater.							
Jet-heater.							
Heater .....	J. P. Dauth .....	199,803	Jan. 29, 1878	1142	335	13	210
Heater .....	S. Sibbald .....	203,659	May 14, 1878	456	130	13	890
Heater .....	D. Sullivan .....	205,304	June 25, 1878	950	282	13	1150
Heater .....	C. Weeks .....	205,018	June 18, 1878	638	188	13	1104
Heater, regulator, and damper combined .....	P. Schaefer .....	204,685	June 11, 1878	269	83	13	1054
Heater and ventilator .....	L. L. Mahan .....	206,339	July 23, 1878	1005	286	14	148
Heater and ventilator combined .....	W. R. Macdonald .....	206,739	Aug. 6, 1878	83	26	14	217
Heating and cooking furniture .....	R. S. Mains .....	208,251	Sept. 24, 1878	739	216	14	455
Heating and cooking apparatus .....	E. Maw .....	210,796	Dec. 10, 1878	444	{ 124 125	{ 14	891
Heating and ventilating buildings .....	W. E. Prall .....	208,633	Oct. 1, 1878	179	52	14	513
Heating and ventilating houses .....	B. R. Hawley .....	209,342	Oct. 29, 1878	984	{ 286 287	{ 14	640
Heating apartments, railway-cars, &c., Apparatus for .....	I. A. Salmon .....	210,563	Dec. 3, 1878	189	50, 51	14	848
Heating apparatus .....	J. P. Avery .....	202,776	Apr. 23, 1878	1003	288	13	750
Heating apparatus .....	A. Burbank .....	209,650	Nov. 5, 1878	128	37	14	698
Heating apparatus .....	E. B. Butterworth .....	202,928	Apr. 30, 1878	1179	340	13	776
Heating apparatus .....	T. Connelly .....	208,376	Sept. 24, 1878	868	253	14	471
Heating apparatus .....	A. Ford .....	209,471	Oct. 29, 1878	1115	325	14	660
Heating apparatus for buildings .....	M. Hullings .....	208,822	Oct. 8, 1878	393	112	14	549
Heating buildings, Apparatus for .....	J. Johnson .....	207,422	Aug. 27, 1878	819	242	14	321
Heating apparatus, Steam .....	D. Needham .....	199,564	Jan. 22, 1878	876	256	13	161
Heating-furnace .....	H. Holcomb .....	202,439	Apr. 16, 1878	625	183	13	695
Heating-furnace .....	D. L. Jaques .....	203,836	May 21, 1878	652	186	13	922
Heating-furnace and range combined .....	J. P. Beck .....	199,347	Jan. 22, 1878	659	193	13	127
Heating-table .....	J. R. Morris .....	209,501	Oct. 29, 1878	1147	334	14	664
Heating tools, Device for .....	S. R. Oldrieve .....	203,554	May 14, 1878	357	101	13	877
Heating water and other fluids, Apparatus for .....	J. Atkinson .....	202,917	Apr. 30, 1878	1169	337	13	775
Heddle-frames, Screw heddle eye or hook for .....	D. C. Brown .....	204,881	June 18, 1878	505	147	13	1086
Heddle-rod tightener .....	J. Butterworth .....	205,611	July 2, 1878	151	46	14	29
Hedge-fence .....	I. O. Childs .....	204,197	May 28, 1878	1065	303	13	978
Hedge-fence .....	P. S. Jenkins .....	203,545	May 14, 1878	344	98	13	876
Hedge-plants, Implement for bending .....	W. Young .....	206,656	July 30, 1878	1360	391	14	196
Hedge-plashing machine .....	A. S. Warren .....	206,282	July 23, 1878	935	264	14	140
Hedge-trimmer .....	J. A. Stephenson .....	207,829	Sept. 10, 1878	260	81	14	385
Hedges, Constructing osage-orange .....	J. Kline .....	207,041	Aug. 13, 1878	399	124	14	259
Heel-burnishing machine .....	J. W. Dodge .....	199,523	Jan. 22, 1878	837	244	13	155
Heel-scouring machine .....	S. N. Cortwell .....	207,394	Aug. 27, 1878	788	234	14	318



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Heel-stiffeners, Apparatus for molding	A. L. Elliott	210,307	Nov. 26, 1878	857	252	14	806
Heel-stiffeners, Machine for forming	A. F. Smith	206,145	July 16, 1878	756	218	14	113
Heel-support	G. T. Fisher	204,552	June 4, 1878	119	41	13	1029
Heel-trimming machine	A. K. Washburn	202,494	Apr. 16, 1878	474	198	13	702
Heels, Machine for cutting wooden	W. W. Abbott	199,247	Jan. 15, 1878	545	161	13	161
Heels, Machine for turning wooden	L. Prenot and G. Marchal	208,989	Oct. 15, 1878	585	170	14	576
Hemp and flax brake	G. Sanford	205,910	July 9, 1878	496	141	14	75
Hen-nest house	J. W. Nichols	203,125	June 18, 1878	743	221	13	1118
Herder	R. D. Soper	202,289	Apr. 9, 1878	456	133	13	667
Herrings, Packing	G. T. Peters	207,980	Sept. 10, 1878	425	128	14	466
Hide-fleshing machine	E. B. Holcomb and D. A. Clay	198,941	Jan. 8, 1878	231	66	13	51
Hides, Apparatus for handling	J. T. Gorsline	199,534	Jan. 22, 1878	850	248	13	157
Hides, Apparatus for handling	C. Steinmann	211,063	Dec. 17, 1878	780	214	14	939
Hides, Machine for boarding and breaking raw	W. Coupe	202,414	Apr. 16, 1878	507	176	13	691
Hides, Machine for unhairing, scouring, and currying	J. A. Talpey	199,597	Jan. 22, 1878	912	267	13	167
Hides, Machine for unhairing, scouring, and currying	J. A. Talpey	207,081	Aug. 13, 1878	437	135	14	264
Hides and skins, Drench-wheel for	I. Wells	200,807	Feb. 26, 1878	955	281	13	403
Hides and skins, Machine for dressing	C. Molinier	208,918	Oct. 15, 1878	510	148	14	568
Hides and skins, Machine for unhairing and scouring	J. W. McDonald	200,078	Feb. 5, 1878	191	60	13	262
Hides and skins, Machine for unhairing and scouring	J. W. McDonald	210,797	Dec. 10, 1878	446	126	14	891
Hides and skins, Machine for unhairing and scouring	G. T. Sheldon	209,298	Oct. 22, 1878	928	270	14	629
Hinge	T. T. Bishop	201,210	Mar. 12, 1878	401	123	13	482
Hinge	T. Fowler	202,162	Apr. 9, 1878	330	97	13	650
Hinge	H. E. Griffin	210,686	Dec. 10, 1878	332	91	14	875
Hinge	J. A. House	204,045	May 21, 1878	875	251	13	950
Hinge	W. S. Mains	204,061	May 21, 1878	893	256	13	953
Hinge	L. Patterson	202,958	Apr. 30, 1878	1209	340	13	780
Hinge	S. M. Wade	207,697	Sept. 3, 1878	112	34	14	363
Hinge and corner-iron, Trunk	G. Kast	208,398	Sept. 24, 1878	890	259	14	474
Hinge, Awning-blind	J. J. Grencough	201,108	Mar. 12, 1878	291	90	13	466
Hinge, Awning-blind	C. L. Hasbrouck	205,083	June 18, 1878	706	209	13	1112
Hinge for cabinet-desk, &c	J. A. Moore	203,286	May 7, 1878	53	16	13	828
Hinge for folding seats	R. T. Hambrook	206,875	Aug. 13, 1878	239	76	14	240
Hinge for gates, &c., Spring	W. Hull	200,657	Feb. 26, 1878	809	238	13	381
Hinge for metallic boxes	D. M. Somers	208,343	Sept. 24, 1878	837	244	14	467
Hinge for sheet-metal ware, boxes, and other articles	W. W. Flint	201,660	Mar. 26, 1878	889	271	13	561
Hinge for sleeping-car berths, Locking	G. L. Carlton and G. H. Crager	207,890	Aug. 27, 1878	783	233	14	317
Hinge for trunks, &c., Stop	C. W. Butler	206,326	July 23, 1878	868	248	14	131
Hinge, Gate	G. E. Goodwin	203,136	Apr. 30, 1878	1381	401	13	803
Hinge, Gate	E. S. Hunt	210,257	Nov. 26, 1878	803	238	14	790
Hinge, Harrow	H. S. Jory	206,458	July 30, 1878	1153	330	14	170
Hinge-joints, Machine for removing pintles from	H. Knickmann	206,580	July 30, 1878	1282	368	14	186
Hinge-joints, Tool for removing pintles from	H. Knickmann	203,466	May 7, 1878	245	70	13	854
Hinge, Lock	P. Adams, jr.	201,476	Mar. 19, 1878	685	210	13	529
Hinge, Lock	N. H. Camp	205,051	June 18, 1878	674	197	13	1108
Hinge, Lock	C. B. Clark	208,152	Sept. 17, 1878	617	183	14	436
Hinge, Lock	C. N. Dutton	210,805	Nov. 26, 1878	855	251	14	806
Hinge, Lock	B. Lent	204,984	June 18, 1878	608	178	13	1699
Hinge, Lock	R. Phipps	208,490	Oct. 1, 1878	85	11	14	494
Hinge, Lock	H. M. Ralston	206,897	Aug. 13, 1878	267	81	14	243
Hinge, Lock	D. T. Rundlet	204,761	June 11, 1878	350	106	13	1064
Hinge, Lock	J. B. Stone	198,822	Jan. 1, 1878	101	28	13	24
Hinge, Reversible	C. F. Rapp	203,293	May 7, 1878	62	19	13	828
Hinge, Spring	I. S. Davis	210,758	Dec. 10, 1878	405	111	14	884
Hinge, Spring	D. W. Housley	208,242	Sept. 24, 1878	729	214	14	454
Hinge, Spring	J. Spruce	208,770	Oct. 8, 1878	337	97	14	541
Hitching apparatus	J. M. Catner	200,256	Feb. 12, 1878	371	110	13	298
Hitching-bar	A. L. Andrews	198,832	Jan. 1, 1878	110	31	13	26
Hitching-post	J. C. Penpler	209,288	Oct. 22, 1878	917	268	14	628
Hitching-post	H. W. C. Thomas and S. H. Knox	209,090	Oct. 15, 1878	762	203	14	593
Hobby-horse	T. J. Hobbs and L. Hunting	199,711	Jan. 29, 1878	1053	308	13	196
Hobby-horse	P. Marqua	208,531	Oct. 1, 1878	75	22	14	499
Hoe	W. Bumby	205,472	July 2, 1878	9	3	14	10
Hoe	W. H. Eggleston	201,395	Mar. 19, 1878	605	185	13	517
Hoe	J. S. Lester	206,802	Aug. 6, 1878	149	46	14	225
Hoe	A. H. Miller	205,667	July 2, 1878	218	64, 65	14	36
Hoe	A. R. Nixon	206,122	July 16, 1878	736	211	14	110
Hoe	J. N. Parker	208,197	Sept. 17, 1878	664	195	14	442
Hoe	T. Weiss	209,009	Oct. 15, 1878	598	174	14	580
Hoe and briar-hook	C. A. Masterson	202,563	Apr. 16, 1878	764	221	13	712
Hoe and cultivator	T. V. Curtis and A. M. Andrews	203,598	May 14, 1878	397	112	13	883
Hoe and cultivator, Horse	T. J. Brown	201,645	Mar. 26, 1878	878	267	13	559
Hoe, Cotton	J. M. Moore	200,926	Mar. 5, 1878	165	35	13	431
Hoe, Cotton	E. H. Rogers	209,923	Nov. 12, 1878	419	126	14	741
Hoe, Farm and garden	J. S. Lester	205,879	July 9, 1878	462	132	14	71
Hoe, Garden	C. W. Polen	203,643	May 14, 1878	438	125	13	888
Hoe, Hand	W. D. Webster	198,910	Jan. 1, 1878	195	55	13	38
Hoe, Weeding	W. Luckhurst	199,375	Jan. 22, 1878	688	202	13	131
Hoeing-machine	H. N. Prout	207,443	Aug. 27, 1878	839	248	14	324
Hoes, Machine for forming the eyes of	E. L. Keeler	205,394	June 25, 1878	1046	310	13	1162
Hoes, Manufacture of	J. Bergmann	207,238	Aug. 20, 1878	616	184	14	290
Hog and sheep catcher	A. Pitcher	208,845	Oct. 8, 1878	425	123	14	553
Hog-catcher	F. M. Smith	201,205	Mar. 12, 1878	385	119	13	480
Hog-cholera compound	E. Anderson	207,474	Aug. 27, 1878	873	249	14	326
Hog-cholera compound	T. Arnold	208,505	Oct. 1, 1878	49	14	14	496
Hog-cholera compound	H. R. and W. N. Budd	203,319	May 7, 1878	91	13	13	832
Hog-cholera compound	W. Cline, jr.	207,345	Aug. 27, 1878	742	214	14	312
Hog-cholera compound	J. P. Cole	206,863	Aug. 13, 1878	228	14	14	239
Hog-cholera compound	H. C. Collier	202,932	Apr. 30, 1878	1183	333	13	777
Hog-cholera compound	A. R. Derrickson	205,364	June 25, 1878	1016	313	13	1153

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Hog-cholera compound .....	D. S. French .....	209, 879	Nov. 12, 1878	376	.....	14	735
Hog-cholera compound .....	A. J. Guinn .....	202, 811	Apr. 23, 1878	1044	.....	13	755
Hog-cholera compound .....	M. Hemmingway .....	208, 975	Oct. 15, 1878	574	.....	14	578
Hog-cholera compound .....	J. T. Maxson .....	206, 595	July 30, 1878	1296	.....	14	188
Hog-cholera compound .....	J. M. Keltner .....	204, 898	June 18, 1878	523	.....	13	1088
Hog-cholera compound .....	J. H. Rees .....	202, 583	Apr. 16, 1878	784	.....	13	714
Hog-cholera compound .....	J. Senn .....	205, 147	June 18, 1878	773	.....	13	1121
Hog-cholera compound .....	G. S. Williams .....	208, 504	Oct. 1, 1878	49	.....	14	496
Hog-cholera compound .....	T. M. Wilson .....	204, 694	June 11, 1878	279	.....	13	1055
Hog-dressing machine .....	I. Boone .....	201, 385	Mar. 19, 1878	506	183	13	516
Hog-ringing implement .....	H. W. Hill .....	203, 272	May 7, 1878	38	12	13	825
Hog-salder and feed-steamer .....	H. Strycker .....	204, 923	June 18, 1878	549	160	13	1091
Hog-trap .....	W. Huston .....	208, 098	Sept. 17, 1878	555	166	14	429
Hog-trap .....	J. W. and C. F. Reed .....	206, 262	July 23, 1878	909	258	14	136
Hog-trough .....	W. H. Tucker .....	210, 276	Nov. 26, 1878	825	243	14	802
Hogs, Device for catching and holding .....	R., sr., and R. Pemble, jr. ....	207, 437	Aug. 27, 1878	831	246	14	323
Hogs from rooting, Ring for preventing .....	J. M. Stansifer .....	204, 171	May 28, 1878	1030	293	13	974
Hoister, Tobacco .....	J. M. Wadlington .....	206, 986	Aug. 13, 1878	347	107	14	253
Hoisting apparatus .....	C. E. Albro .....	200, 961	Mar. 5, 1878	136	44, 45	13	436
Hoisting apparatus .....	O. S. Presbrey .....	207, 681	Sept. 3, 1878	97	29	14	361
Hoisting apparatus, Brake mechanism for .....	S. H. Bevins, J. Weis, and W. H. Phillips .....	201, 150	Mar. 12, 1878	336	103	13	472
Hoisting apparatus, Tobacco .....	L. W. Brewster .....	210, 447	Dec. 3, 1878	61	15	14	832
Hoisting apparatus, Tobacco .....	W. A. and W. S. Guy .....	207, 030	Aug. 13, 1878	390	120	14	258
Hoisting-blocks, Universal joint for .....	C. W. Hunt .....	210, 608	Dec. 10, 1878	249	68	14	865
Hoisting-bucket .....	W. T. Warner .....	203, 523	May 7, 1878	300	86	13	861
Hoisting-cages, Safety attachment for .....	C. W. Lane .....	209, 963	Nov. 12, 1878	396	119	14	738
Hoisting clamp, Barrel .....	W. Bulkeley .....	201, 648	Mar. 26, 1878	881	268	13	500
Hoisting device, Tobacco .....	C. F. Johnson .....	204, 332	May 28, 1878	1109	342	13	995
Hoisting-jack .....	R. O. Keefe .....	207, 661	Sept. 3, 1878	79	24	14	359
Hoisting-machine .....	J. Fensom .....	209, 336	Oct. 22, 1878	977	{ 284 285 }	14	639
Hoisting-machine .....	L. H. Hall .....	210, 850	Dec. 17, 1878	511	145	14	908
Hoisting-machine .....	M. Jacker .....	206, 734	Aug. 6, 1878	77	25	14	216
Hoisting-machine .....	P. C. Johnson .....	199, 071	Jan. 8, 1878	357	105	13	72
Hoisting-machine .....	S. E. Stokes, jr. ....	202, 298	Apr. 9, 1878	464	136	13	669
Hoisting-machine .....	W. C. Williamson .....	203, 808	May 14, 1878	614	171	13	909
Hoisting-machines, Friction-drum for .....	J. Rushworth .....	200, 345	Feb. 12, 1878	465	137	13	312
Hoistways, Mechanism for opening and closing doors or covers of .....	J. B. Waring .....	200, 112	Feb. 5, 1878	224	68	13	267
Holdback .....	F. P. Pfeghar .....	209, 190	Oct. 22, 1878	828	229	14	615
Holdback attachment for carriages .....	M. W. Spaulding .....	199, 589	Jan. 22, 1878	905	264	13	165
Holdback, Carriage .....	R. T. Barton .....	206, 764	Aug. 6, 1878	108	34	14	220
Holdback for double harness .....	J. E. Reeves .....	202, 584	Apr. 16, 1878	785	226	13	714
Holdback, Vehicle .....	O. Brothers, jr. ....	206, 221	July 23, 1878	862	246	14	130
Holdback, Vehicle .....	E. E. Morse .....	207, 061	Aug. 13, 1878	419	130	14	261
Holdback, Vehicle .....	O. M. Robinson .....	201, 125	Mar. 12, 1878	311	95	13	469
Holder:							
See Bag-holder.	Mucilage-holder.						
Beverage-holder.	Music-holder.						
Billiard-chalk holder.	Napkin-holder.						
Bird-cage feed-cup holder.	Neck-wear holder.						
Bobbin-holder.	Paper-holder.						
Bolt-holder.	Paper-bag holder.						
Book-holder.	Pen-holder.						
Boot and shoe holder.	Pen and pencil holder.						
Bottle-stopper holder.	Picture-frame-cord holder.						
Braid-holder.	Plow-coltter holder.						
Brake-block holder.	Rein-holder.						
Brush and blacking-box holder.	Rope-holder.						
Brush and broom holder.	Sad-iron holder.						
Cake-holder.	Sash-holder.						
Candle-holder.	Saw-file holder.						
Cartridge-holder.	Screw-cutting die-holder.						
Cigarette-holder.	Soap-holder.						
Clothes-line holder.	Spinning-ring holder.						
Coin-holder.	Sponge-holder.						
Copy-holder.	Spool-holder.						
Dental-tool holder.	Spooling-machine-bobbin holder.						
Desk slate-holder.	Spoon-holder.						
Felly-joint holder.	Strap-holder.						
File-holder.	String-holder.						
Fluting and sad iron holder.	Tablet-holder.						
Fruit-jar holder.	Tape-holder.						
Globe-holder.	Thread-holder.						
Grate-holder.	Ticket and label holder.						
Hat-holder.	Trace-holder.						
Hoof-moistener holder.	Tug-holder.						
Instep-holder.	Twine-holder.						
Label-holder.	Type-holder.						
Mallet-holder.	Umbrella-holder.						
Mop-holder.							
Hominy-mill .....	J. Engelke, F. Feiner, and V. Weismantel .....	207, 261	Aug. 20, 1878	642	191	14	293
Honey-box .....	J. E. Moore .....	203, 483	May 7, 1878	260	75	13	856
Honey-comb, Artificial .....	A. B. Lawther .....	200, 549	Feb. 19, 1878	677	199	13	353
Honey-comb foundation .....	M. Metcalf .....	207, 057	Aug. 13, 1878	415	128	14	261
Honey-comb foundation, Artificial .....	J. E. Hetherington .....	208, 595	Oct. 1, 1878	142	41	14	508
Honey-extractor, Centrifugal .....	C. F. Muth .....	208, 327	Sept. 24, 1878	819	{ 239 240 }	14	465
Hoof-moistener holder .....	G. P. Merriam .....	205, 118	June 18, 1878	738	219	13	1117

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Hoof-parer .....	J. Künstler .....	201,687	Mar. 26, 1878	912	278	13	565
Hook:							
<i>See</i> Back-band hook.      Saddle-hook.							
Bale-tie hook.          Snap-hook.							
Belt-hook.              Spring-hook.							
Bench-hook.            Staple-hook.							
Button-hook.          Suspension-hook.							
Check-hook.            Swivel-hook.							
Lacing-hook.          Twin-hook.							
Picture-hook.         Whiffletree-hook.							
Rein-hook.            .....							
Hook .....	F. Kortick .....	207,877	Sept. 10, 1878	316	96	14	332
Hoop:							
<i>See</i> Barrel-hoop.          Truss-hoop.							
Trundling-hoop.        .....							
Hoop .....	J. B. Dougherty .....	207,721	Sept. 3, 1878	140	42	14	367
Hoop-cutting machine .....	J. B. Dougherty .....	209,962	Nov. 10, 1878	475	143	14	752
Hoop-cutting machine, Barrel .....	W. D. Johnson .....	204,162	Apr. 30, 1878	1412	412	13	807
Hoop-fastener .....	A. Andrén .....	210,482	Dec. 3, 1878	93	24	14	836
Hoop-machine .....	G. B. Selden .....	203,949	May 21, 1878	775	222	13	958
Hoop machine, Barrel .....	J. Greenwood .....	109,058	Jan. 8, 1878	346	101	13	70
Hoop machine, Barrel .....	C. W. Thompson .....	108,825	Jan. 1, 1878	103	29	13	24
Hoop-making machine .....	J. Greenwood .....	109,058	Jan. 8, 1878	344	100	18	69
Hoops from the log, Machine for cutting .....	J. B. Dougherty .....	203,420	May 7, 1878	203	58, 59	13	848
Hoops, Machine for coiling .....	J. H. Ward .....	209,735	Nov. 5, 1878	218	66	14	710
Hoops, Machine for making barrel .....	C. W. Thompson .....	202,073	Apr. 2, 1878	212	62	13	629
Hoops, Machine for making wooden barrel .....	G. W. Bowen and E. Nichols .....	210,085	Nov. 10, 1878	608	181	14	709
Hop-picking box .....	William Brooks .....	200,892	Mar. 5, 1878	75	26	13	427
Hop-picking machine .....	H. H. Hatheway .....	203,910	May 21, 1878	732	210	13	922
Hop-picking machine .....	H. G. Locke .....	201,026	Mar. 5, 1878	206	65	13	446
Hop-picking machine .....	S. D. Locke .....	203,351	May 7, 1878	118	35	13	836
Hop-picking machine .....	H. G. Locke .....	207,554	Aug. 27, 1878	940	276	14	336
Hop-press .....	C. A. Sands .....	206,977	Aug. 13, 1878	337	103	14	251
Hops and furnace used therefor, Curing .....	W. W. Edgarton .....	108,875	Jan. 1, 1878	155	44	13	33
Hops, Disintegrating the stalks of .....	I. D. Nördlinger .....	209,286	Oct. 22, 1878	916	.....	14	628
Hops, Sack for baling .....	C. A. Sands .....	206,976	Aug. 13, 1878	337	103	14	251
Hopper for tanks, &c., Movable .....	F. C. Prindle .....	204,370	May 28, 1878	1239	352	13	1000
Hopple .....	W. S. Mead .....	203,116	June 18, 1878	736	219	13	1117
Horn into sheets, Machine for cutting .....	M. M. Goldsmith, G. M. Cruikshank, and T. Brown .....	206,050	Feb. 5, 1878	160	52	13	258
Horse-bit .....	J. H. Robinson .....	202,195	Apr. 9, 1878	301	106	13	654
Horse-blanket .....	I. H. Hodgdon .....	199,292	Jan. 15, 1878	595	174	13	168
Horse-boot .....	W. H. Franklin .....	206,273	Feb. 12, 1878	891	115	13	301
Horse-boot .....	G. W. Wemple .....	205,159	June 18, 1878	784	232	13	1127
Horse-brake .....	I. Spitz .....	204,258	May 28, 1878	1124	321	13	985
Horse-checking device .....	J. Davies .....	207,397	Aug. 27, 1878	790	235	14	318
Horse-cleaner .....	M. P. Washburn .....	202,769	Apr. 23, 1878	997	287	13	749
Horse-clipper .....	W. Brown .....	210,909	Dec. 17, 1878	504	164, 165	14	917
Horse-detacher .....	O. Brothers, jr. ....	206,222	July 23, 1878	863	246	14	130
Horse-detacher .....	W. G. Cummins .....	207,718	Sept. 3, 1878	138	42	14	308
Horse-detacher .....	W. G. Cummins .....	207,951	Sept. 10, 1878	395	119	14	402
Horse-detacher .....	N. Johnston .....	200,541	Feb. 19, 1878	667	196	13	351
Horse-detacher .....	F. J. Leldorf .....	199,298	Jan. 15, 1878	601	175	13	109
Horse-detacher .....	R. J. Pond .....	200,834	Nov. 12, 1878	329	98	14	729
Horse-detacher .....	L. H. Reed .....	210,212	Nov. 29, 1878	757	225	14	793
Horse-detacher .....	M. C. Thomas .....	203,216	Apr. 30, 1878	1467	429	13	613
Horse-detacher .....	J. H. Voss .....	207,574	Aug. 27, 1878	990	290	14	242
Horse-detacher .....	C. J. Walser .....	207,143	Aug. 20, 1878	517	156	14	278
Horse-detaching device .....	R. Fox .....	205,182	June 25, 1878	820	243	13	1133
Horse-foot pad .....	M. Gallagher .....	206,245	Oct. 22, 1878	876	254	14	622
Horse-foot pad .....	G. A. Küstner .....	202,947	Apr. 30, 1878	1197	345	13	778
Horse-hitching device .....	D. Starkey .....	204,458	June 4, 1878	42	14	13	1018
Horse-nail machine .....	J. Mills .....	207,059	Aug. 13, 1878	417	129	14	261
Horse-power .....	C. H. Baker .....	208,948	Oct. 15, 1878	543	159	14	573
Horse-power .....	P. Beche .....	207,795	Sept. 10, 1878	227	71	14	381
Horse-power .....	T. C. Bettis and J. W. Heath .....	204,185	May 28, 1878	1052	298, 299	13	976
Horse-power .....	J. H. Blain .....	207,156	Aug. 20, 1878	520	159	14	279
Horse-power .....	G. E. Burt and E. A. Hildreth .....	203,320	May 7, 1878	91	26	13	832
Horse-power .....	W. W. Dingee .....	200,439	Feb. 10, 1878	569	168	13	356
Horse-power .....	A. B. Farquhar .....	209,032	Oct. 15, 1878	636	184	14	565
Horse-power .....	E. Golucke .....	109,053	Jan. 8, 1878	341	100	13	69
Horse-power .....	E. Golucke .....	207,512	Aug. 27, 1878	917	270	14	333
Horse-power .....	A. Hall .....	204,909	June 18, 1878	594	173	13	1067
Horse-power .....	C. E. Macarthy .....	201,807	Mar. 26, 1878	1053	815	13	563
Horse-power .....	C. E. Macarthy .....	206,592	July 30, 1878	1292	372	14	188
Horse-power .....	C. E. Macarthy .....	209,039	Nov. 5, 1878	177	52	14	704
Horse-power .....	W. G. McComas .....	205,563	July 2, 1878	106	31	14	22
Horse-power .....	J. Miller .....	208,413	Sept. 24, 1878	904	265	14	476
Horse-power .....	J. T. Moore .....	206,399	July 30, 1878	1088	311	14	162
Horse-power .....	W. H. Phelps .....	204,602	June 4, 1878	175	56	13	1037
Horse-power .....	J. C. Randall .....	193,801	Jan. 29, 1878	1193	350	13	217
Horse-power .....	S. Thomas .....	201,207	Mar. 12, 1878	388	120	13	490
Horse-power equalizer .....	L. B. Rowland .....	200,973	Aug. 13, 1878	333	102	14	251
Horse-power, Governor for .....	J. D. Reiff .....	207,984	Sept. 10, 1878	430	130	14	407
Horse-power link, Endless-tread .....	W. Samson .....	202,054	Apr. 2, 1878	193	56	13	626
Horse-power mill .....	W. C. Pitts .....	203,292	May 7, 1878	61	19	13	828
Horse-power, Mounted .....	M. H. Pitts .....	201,862	Apr. 23, 1878	1098	315	13	703
Horse-rack .....	E. S. Blair .....	205,522	July 2, 1878	61	18	14	17
Horse-scraper .....	T. W. Rounds and T. L. Reed .....	209,360	Oct. 29, 1878	1003	292	14	643
Horse-tail protector .....	A. Weide .....	203,737	Nov. 5, 1878	221	66	14	710
Horse-tail tie .....	B. Blackstone .....	203,167	Apr. 30, 1878	1248	292	13	730
Horse-toe-weight .....	C. Ferrer .....	201,530	Mar. 10, 1878	550	160	13	510

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Horse toe-weight.....	H. D. McKinney.....	209, 575	Nov. 5, 1878	41	11	14	686
Horse toe-weight.....	A. F. Pitt.....	207, 547	Aug. 27, 1878	957	280	14	338
Horse toe-weight.....	A. H. Reynolds.....	209, 421	Oct. 29, 1878	1064	309	14	652
Horse toe-weight.....	J. W. Ropp.....	208, 927	Oct. 15, 1878	521	151	14	570
Horse toe-weight.....	H. Satterwhite.....	200, 669	Feb. 26, 1878	818	241	13	382
Horse toe-weight.....	E. D. Smith, C. C. Matson, and P. R. Martin.....	209, 840	Nov. 12, 1878	336	100	14	730
Horses, Apparatus for administering medicine to.....	H. Hartman.....	200, 717	Feb. 26, 1878	871	256	13	389
Horses, Apparatus for hitching and securing runaway.....	F. W. Schwiers.....	199, 381	Jan. 22, 1878	694	204	13	132
Horses, Blinder for.....	B. Rice.....	204, 844	June 11, 1878	444	130	13	1074
Horses, Device for cleaning.....	J. H. Fenton.....	208, 803	Oct. 8, 1878	376	107	14	546
Horses, Device for driving.....	E. Wilder.....	200, 781	Feb. 26, 1878	929	273	13	399
Horses, Foot-bath for.....	S. S. Crooker and A. Wilcox.....	204, 482	June 4, 1878	62	21	13	1021
Horses from vehicles, Apparatus for detaching.....	W. A. Bryant.....	202, 223	Apr. 9, 1878	389	113	13	658
Horses, Implements for cleaning.....	A. A. Russell.....	201, 051	Mar. 5, 1878	232	73	13	450
Horses, Instrument for administering balls to.....	J. Middleditch.....	199, 849	Jan. 29, 1878	1184	347	13	216
Horses, Mechanism for stopping runaway.....	T. B. Hand.....	205, 079	June 18, 1878	700	207	13	1112
Horses' teeth, Machine for smoothing and leveling.....	C. D. House.....	200, 300	Feb. 12, 1878	417	124	13	305
Horses to vehicles, Device for hitching.....	E. Repp.....	200, 763	Feb. 26, 1878	913	268	13	396
Horseshoe.....	D. Alger.....	198, 923	Jan. 8, 1878	215	61	13	49
Horseshoe.....	H. M. Clemons.....	206, 003	July 16, 1878	608	175	14	95
Horseshoe.....	D. S. Darling.....	200, 180	Feb. 12, 1878	297	89	13	287
Horseshoe.....	J. L. Dodge.....	199, 422	Jan. 22, 1878	734	216	13	138
Horseshoe.....	D. F. Fetter.....	206, 939	Aug. 13, 1878	305	93	14	247
Horseshoe.....	F. H. Hall.....	204, 968	June 18, 1878	593	173	13	1097
Horseshoe.....	J. C. Hamilton.....	207, 603	Sept. 3, 1878	19	7	14	352
Horseshoe.....	J. R. Howard.....	200, 301	Feb. 12, 1878	418	124	13	305
Horseshoe.....	R. B. Hugunin.....	199, 830	Jan. 29, 1878	1166	342	13	214
Horseshoe.....	J. P. Jubb.....	211, 023	Dec. 17, 1878	721	198	14	933
Horseshoe.....	H. C. McCeney.....	199, 302	Jan. 15, 1878	605	177	13	110
Horseshoe.....	E. Murraine.....	199, 927	Feb. 5, 1878	40	13	13	239
Horseshoe.....	T. Penrose.....	208, 844	Oct. 8, 1878	424	123	14	553
Horseshoe.....	J. A. Risdon.....	202, 758	Apr. 23, 1878	986	283	13	748
Horseshoe.....	E. L. Tevis.....	198, 824	Jan. 1, 1878	102	29	13	24
Horseshoe.....	A. W. Smith.....	207, 905	Sept. 10, 1878	348	105	14	396
Horseshoe.....	O. Von Ruville.....	205, 221	June 25, 1878	863	255	13	1128
Horseshoe and pad.....	G. C. Shaw.....	210, 812	Dec. 10, 1878	462	130	14	892
Horseshoe-bar.....	L. G. Claude.....	208, 205	Sept. 24, 1878	787	229	14	461
Horseshoe-bars, Machine for rolling.....	W. R. Justus and W. D. Young.....	211, 024	Dec. 17, 1878	722	199	14	933
Horseshoe-bending machine.....	J. J. Reimer.....	205, 905	July 9, 1878	490	140	14	74
Horseshoe-blanks, Device for gaging the cutting of.....	J. T. Walker.....	210, 377	Nov. 26, 1878	942	273	14	817
Horseshoe-blanks, Machine for bending.....	J. H. Snyder.....	208, 430	Sept. 24, 1878	928	272	14	479
Horseshoe-blanks, Machine for bending.....	J. T. Walker.....	210, 376	Nov. 26, 1878	940	273	14	817
Horseshoe-blanks, Machine for creasing, punching, and swaging.....	F. Holub.....	205, 645	July 2, 1878	187	56, 57	14	33
Horseshoe-blanks, Machine for manufacturing.....	F. Holub.....	205, 385	June 25, 1878	1036	307	13	1160
Horseshoe-blanks, Machine for rolling.....	F. Holub.....	205, 386	June 25, 1878	1037	308	13	1160
Horseshoe-buffer.....	C. Hartmann.....	198, 885	Jan. 1, 1878	167	47	13	34
Horseshoe-calk.....	H. A. Bartholomew.....	210, 398	Dec. 3, 1878	8	2	14	825
Horseshoe-calk attachment.....	R. J. Bartley.....	210, 900	Dec. 17, 1878	584	161	14	916
Horseshoe-calk sharpener.....	J. M. Hunter.....	207, 744	Sept. 3, 1878	162	50	14	370
Horseshoe-calks, Attaching.....	W. Dickinson.....	201, 335	Mar. 19, 1878	545	167	13	509
Horseshoe-finishing die.....	J. J. Reimer.....	205, 978	July 16, 1878	583	167	14	91
Horseshoe-machine.....	F. Holub.....	205, 644	July 2, 1878	185	55, 56	14	33
Horseshoe-nail blanks, Machine for reducing the shanks of.....	G. P. Clapp.....	201, 094	Mar. 12, 1878	277	86	13	464
Horseshoe-nail machine.....	J. P. Flanders and N. W. Goodrich.....	205, 257	June 25, 1878	897	265	13	1143
Horseshoe-nail machine.....	J. T. Hough.....	202, 824	Apr. 23, 1878	1060	304	13	757
Horseshoe-nail machine.....	J. D. Sumner.....	206, 907	Aug. 13, 1878	276	84	14	244
Horseshoe-nail machine.....	J. E. Wheeler and D. B. Loring.....	199, 483	Jan. 22, 1878	791	232	13	148
Horseshoe-nail plates or bars, Machine for rolling.....	D. Fraser, jr.....	207, 651	Sept. 3, 1878	70	21	14	358
Horseshoe-nails, Machine for finishing.....	G. L. Hall.....	210, 322	Nov. 26, 1878	874	257	14	808
Horseshoe-nails, Machine for finishing.....	J. B. Husted.....	208, 683	Oct. 8, 1878	244	70	14	529
Horseshoe-nails, Machine for finishing.....	J. E. Wheeler and D. B. Loring.....	201, 727	Mar. 26, 1878	952	292	13	571
Horseshoe-nails, Machine for forging.....	J. A. Hutchinson and D. Armstrong.....	205, 554	July 2, 1878	95	27, 28	14	21
Horseshoe-nails, Machine for forging.....	S. S. Putnam.....	207, 444	Aug. 27, 1878	840	248	14	324
Horseshoe-nails, Machine for making.....	D. B. Loring.....	203, 282	May 7, 1878	46	14	13	826
Horseshoe-nails, Machine for pointing and finishing.....	S. S. Putnam.....	201, 701	Mar. 26, 1878	923	282	13	567
Horseshoe-nails, Machine for the manufacture of.....	J. Whysall, jr., and C. M. Merriek.....	209, 845	Nov. 12, 1878	342	102	14	730
Horseshoe-nails, Making.....	N. C. Lewis.....	200, 315	Feb. 12, 1878	435	129	13	308
Horseshoe-nails, Manufacture of.....	C. French.....	202, 534	Apr. 16, 1878	732	211	13	708
Horseshoe-nails, Manufacture of.....	G. E. Whitney.....	199, 767	Jan. 29, 1878	1103	324	13	204
Horseshoe-pad.....	C. A. Wells.....	210, 173	Nov. 19, 1878	700	208	14	782
Horseshoe-spring.....	J. R. Pierce.....	203, 674	Apr. 30, 1878	1319	383	13	795
Horseshoe-weight.....	J. Myers.....	201, 937	Apr. 2, 1878	76	21	13	610
Horseshoe-weight.....	B. F. Porter.....	210, 146	Nov. 19, 1878	673	200	14	778
Horseshoes, Die for making.....	G. Bryden.....	206, 859	Aug. 13, 1878	223	72	14	238
Horseshoes, Machine for making.....	D. H. Hatlee.....	206, 726	Aug. 6, 1878	70	22, 23	14	215
Horseshoes, Manufacture of.....	H. J. Batchelder.....	200, 425	Feb. 19, 1878	556	164	13	334
Horseshoes, Manufacture of.....	G. Bryden.....	206, 858	Aug. 13, 1878	223	71	14	238
Horseshoes, Manufacture of.....	J. Russell.....	199, 228	Jan. 15, 1878	529	156	13	99
Horseshoes, Snow-plate for.....	I. Quinby.....	209, 983	Nov. 19, 1878	497	151	14	755
Hose.....	R. P. Beatty and J. H. Haulenbeck.....	209, 953	Nov. 19, 1878	465	141	14	751
Hose, Attaching handles to.....	C. Callahan.....	209, 859	Nov. 12, 1878	357	106	14	732



*Alphabetical list of inventions—Continued.*

Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Hose attachment .....	J. Dawson .....	205,251	June 25, 1878	892	264	13	1142
Hose-band .....	F. W. Robertshaw .....	210,560	Dec. 3, 1878	186	49	14	847
Hose-carriage .....	J. Wilz .....	210,284	Nov. 26, 1878	833	245	14	803
Hose-carriage, Hand .....	C. Castle .....	201,388	Mar. 19, 1878	590	184	13	516
Hose-clamp .....	D. D. Hayes .....	210,422	Dec. 3, 1878	34	8	14	838
Hose-clamp .....	S. C. Smith .....	204,770	June 11, 1878	300	108	13	1065
Hose-clamp .....	F. W. Wolf .....	207,469	Aug. 27, 1878	868	256	14	327
Hose-coupling .....	W. A. Caswell .....	199,349	Jan. 22, 1878	661	194	13	127
Hose-coupling .....	J. Davies .....	210,923	Dec. 17, 1878	609	168	14	919
Hose-coupling .....	J. Grether .....	206,172	July 23, 1878	808	231	14	123
Hose-coupling .....	S. Sibley .....	205,507	July 2, 1878	45	14	14	15
Hose-coupling .....	F. W. Wolf .....	207,470	Aug. 27, 1878	868	256	14	327
Hose-coupling, Electric .....	A. Work .....	202,392	Apr. 16, 1878	577	170	13	689
Hose-couplings, Relief-valve for .....	T. T. Prosser .....	211,046	Dec. 17, 1878	762	209	14	937
Hose-elevator and fire-escape .....	I. Gibbs .....	205,855	July 9, 1878	435	124	14	68
Hose from couplings, Apparatus for detaching .....	E. B. Preston .....	205,902	July 9, 1878	487	139	14	74
Hose, Machinery for manufacturing .....	H. J. Merrens .....	186	Apr. 16, 1878	638	186	13	697
Hose-nozzle .....	J. W. Gray .....	203,539	May 14, 1878	338	96	13	875
Hose-nozzle .....	G. F. Palmer .....	208,330	Sept. 24, 1878	822	240	14	465
Hose-nozzle .....	G. N. Raymond and G. B. Perkins .....	208,122	Sept. 17, 1878	586	174	14	432
Hose-nozzle support .....	A. Weber .....	202,207	Apr. 9, 1878	370	109	13	655
Hose-pipe nozzle .....	C. H. Rodig .....	199,576	Jan. 22, 1878	888	260	13	163
Hose-pipe, Textile-fabric .....	J. T. Hayden .....	205,267	June 25, 1878	906	268	13	1144
Hose-rack .....	C. Callahan .....	209,860	Nov. 12, 1878	357	107	14	732
Hose-reel .....	T. J. Cain .....	210,402	Dec. 3, 1878	11	3, 4	14	826
Hose-reel .....	B. B. Douglas .....	205,738	July 9, 1878	311	91	14	82
Hose-reel .....	H. G. Fiske .....	199,817	Jan. 29, 1878	1153	339	13	212
Hose-reel .....	J. W. Manard .....	209,278	Oct. 22, 1878	909	265	14	627
Hose to couplings, Apparatus for attaching .....	W. A. Caswell .....	199,350	Jan. 22, 1878	662	194	13	127
Hot air, Apparatus for the production of .....	E. Moreau .....	201,439	Mar. 19, 1878	650	198	13	524
Hot-air deflector and evaporator .....	S. B. Sexton .....	201,054	Mar. 5, 1878	235	74	13	451
Hot-air engine .....	B. F. McKinley .....	206,597	July 30, 1878	1297	373	14	188
Hot-air engine .....	J. B. Ward .....	198,827	Jan. 1, 1878	166	30	13	24
Hot-air furnace .....	C. M. Baxter .....	208,784	Oct. 8, 1878	349	100	14	643
Hot-air furnace .....	C. W. Durham .....	199,043	Jan. 8, 1878	330	97	13	67
Hot-air furnace .....	J. M. Graff .....	210,418	Dec. 3, 1878	31	7	14	838
Hot-air furnace .....	H. M. Phinney .....	205,762	July 9, 1878	337	98	14	55
Hot-air furnace and stove .....	J. Carton .....	208,223	Sept. 24, 1878	707	208	14	451
Hot-air register .....	J. W. Collins .....	205,786	July 9, 1878	364	105	14	58
Hot-air register and evaporator .....	W. L. McDowell .....	206,890	Aug. 13, 1878	261	80	14	242
Hot-air registers, Adjustable foot-rest for .....	J. Bonnet .....	200,429	Feb. 19, 1878	560	165	13	335
Hot air, Utilizing .....	S. C. Salisbury .....	204,094	May 21, 1878	928	266	13	957
Hot-atmosphere and medicated bath .....	G. M. Barondis .....	200,319	Oct. 29, 1878	959	280	14	637
Hot-bath apparatus .....	T. Galbraith .....	200,275	Feb. 12, 1878	393	110	13	262
Hot-press for molding plates, &c., from veneers and other materials .....	G. Gardner .....	204,808	June 11, 1878	404	118	13	1670
Hot-water heater for buildings .....	J. W. Hardwick .....	200,391	Feb. 19, 1878	523	154	13	329
Hot-water heating apparatus .....	J. D. Willoughby .....	209,742	Nov. 5, 1878	224	68	14	711
House:							
See Bathing-house.	Hen-nest house.						
Fruit-drying house.	Portable house.						
Ice-house.	Store-house.						
House .....	J. Decombe .....	204,545	June 4, 1878	113	39	13	1029
House-ventilator .....	J. E. Richard .....	202,869	Apr. 23, 1878	1106	317	13	765
Houses, Construction of .....	R. G. and C. G. Lindsay .....	199,076	Jan. 8, 1878	362	107	13	72
Household press for fruits, &c .....	E. A. Stears .....	200,487	Feb. 19, 1878	615	181	13	344
Household utensil .....	E. Brown .....	207,161	Aug. 20, 1878	533	100	14	289
Hub-attaching device .....	J. C. Hendry .....	202,726	Apr. 23, 1878	949	272	13	745
Hub-attaching device .....	J. C. Hendry .....	203,911	May 21, 1878	733	210	13	952
Hub-attaching device .....	S. Kepner .....	199,914	Feb. 5, 1878	29	9	13	237
Hub-attaching device .....	F. C. Lee .....	200,735	Feb. 26, 1878	889	261	13	392
Hub-boring machine .....	J. Krieth .....	201,350	Mar. 19, 1878	562	173	13	511
Hub, Carriage-wheel .....	J. Krieth .....	205,965	July 16, 1878	568	162	14	89
Hub, Carriage-wheel .....	W. Reinhard .....	207,303	Aug. 20, 1878	682	203	14	299
Hub-mortising machine .....	P. Jones .....	210,858	Dec. 17, 1878	519	147	14	909
Hub, Vehicle .....	A. W. Anthoine .....	205,333	June 25, 1878	984	291	13	1154
Hub, Vehicle .....	F. M. Atkinson .....	200,241	Feb. 12, 1878	354	105	13	296
Hub, Vehicle .....	G. P. Bennett .....	198,924	Jan. 8, 1878	216	61	13	49
Hub, Vehicle .....	W. Mullins .....	206,476	July 30, 1878	1168	335	14	172
Hub, Vehicle .....	E. S. Parmelee and B. A. Treat .....	205,975	July 16, 1878	581	160	14	91
Hub, Vehicle .....	G. L. Rouse and M. W. Stoddard .....	207,210	Aug. 20, 1878	586	176	14	287
Hub, Vehicle .....	J. M. Whiting .....	202,208	Apr. 9, 1878	371	109	13	655
Hub, Vehicle-wheel .....	W. H. Armor .....	208,279	Sept. 24, 1878	771	225	14	459
Hub, Vehicle-wheel .....	G. Bartlett .....	206,213	July 23, 1878	854	244	14	129
Hub, Vehicle-wheel .....	J. Lane .....	204,903	June 18, 1878	527	154	13	1089
Hub, Vehicle-wheel .....	D. May .....	208,748	Oct. 8, 1878	312	89	14	538
Hub, Vehicle-wheel .....	T. J. Stanwood and G. W. Parker .....	206,199	July 23, 1878	841	240	14	127
Hub, Vehicle-wheel .....	S. T. F. Sterick .....	203,669	May 14, 1878	466	133	13	891
Hub, Vehicle-wheel .....	C. T. Wecker .....	202,315	Apr. 9, 1878	484	142	13	671
Hub, Vehicle-wheel .....	C. K. Wilcox .....	199,244	Jan. 15, 1878	543	160	13	101
Hub, Vehicle-wheel .....	W. H. Wright .....	201,583	Mar. 19, 1878	801	244	13	544
Hub, Wagon .....	M. D. Golder .....	200,049	Feb. 5, 1878	159	51	13	238
Hub, Wheel .....	E. D. and O. B. Reynolds .....	199,863	Jan. 29, 1878	1194	350	13	218
Hub, Wheel .....	W. B. Tucker .....	200,231	Feb. 12, 1878	345	103	13	285
Hub wrench, Vehicle .....	A. W. Anthoine .....	206,293	July 23, 1878	945	268	14	141
Hubs, Chill for .....	P. H. Burns .....	204,479	June 4, 1878	61	20	13	1021
Hubs, Sand-band for vehicle .....	D. Foglebach .....	204,719	June 11, 1878	307	94	13	1659
Huller:							
See Fruit-huller.	Pea and bean huller.						
Husking and shelling implement .....	L. F. Johnston .....	208,178	Sept. 17, 1878	649	191	14	449
Hydrant .....	H. C. Apcl .....	210,394	Dec. 3, 1878	5	1	14	825
Hydrant .....	A. C. Austin .....	200,121	Feb. 12, 1878	241	73	13	379
Hydrant .....	C. Carr .....	208,072	Sept. 17, 1878	532	159	14	425
Hydrant .....	L. P. Clark .....	209,460	Oct. 29, 1878	1107	322	14	658



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Hydrant.....	P. Connolly.....	202,793	Apr. 23, 1878	1019	203	13	552
Hydrant.....	F. Jarecki.....	207,185	Aug. 20, 1878	560	168	14	283
Hydrant.....	W. McNamara.....	201,203	Mar. 12, 1878	451	139	13	489
Hydrant.....	P. White and J. C. Kupferle.....	202,316	Apr. 9, 1878	484	142	13	671
Hydrant and street-washer.....	J. B. Fish.....	200,043	Feb. 5, 1878	154	50	13	257
Hydrant, Fire.....	S. Rainey.....	206,611	July 30, 1878	1311	377	14	190
Hydrant for watering stock.....	J. Compton.....	207,015	Aug. 13, 1878	376	115	14	256
Hydrant sewer-trap.....	W. C. Amish.....	200,507	Feb. 26, 1878	743	217	13	371
Hydrant-suctions, Coupling for.....	J. Stoddard.....	203,501	Nov. 5, 1878	56	17	14	688
Hydrant-valve.....	J. Bains.....	200,162	Feb. 12, 1878	282	84	13	284
Hydrant-valve.....	F. B. Stevens and J. L. Bond.....	198,756	Jan. 1, 1878	28	7	13	13
Hydrant-valve.....	D. Zuern.....	199,890	Jan. 29, 1878	1219	358	13	221
Hydrants, street-washers, &c., Valve.....	P. H. Donahoe.....	204,010	May 21, 1878	842	241	13	946
Hydraulic elevator.....	G. H. Bailey.....	208,282	Sept. 24, 1878	774	226	14	459
Hydraulic elevator.....	C. W. Baldwin.....	201,980	Apr. 2, 1878	116	34	13	616
Hydraulic elevator.....	M. P. Higgins.....	203,271	May 7, 1878	37	11	13	825
Hydraulic elevator.....	C. H. Morgan.....	201,037	Mar. 5, 1878	217	68, 69	13	448
Hydraulic elevator.....	W. O'Keefe.....	206,333	July 23, 1878	1020	292	14	150
Hydraulic elevator.....	C. R. Otis.....	203,895	July 9, 1878	478	137	14	73
Hydraulic elevator.....	R. Schmidt.....	203,782	May 14, 1878	566	164	13	906
Hydraulic elevator.....	J. G. Willard.....	201,078	Mar. 5, 1878	256	80	13	453
Hydraulic elevator.....	M. L. Wyman.....	203,520	May 7, 1878	267	85	13	861
Hydraulic elevators, Lowering attachment to.....	C. Cookson.....	209,110	Oct. 22, 1878	739	214	14	604
Hydraulic elevators, Valve-gear for.....	C. W. Baldwin.....	202,215	Apr. 9, 1878	378	111	13	656
Hydraulic elevators, Valve-operating mechanism for.....	E. B. Perkins.....	203,404	May 7, 1878	270	78	13	858
Hydraulic engine.....	L. S. Chandler and S. M. Silver.....	207,301	Aug. 27, 1878	784	233	14	317
Hydraulic engine.....	W. H. Clark.....	201,095	Mar. 12, 1878	279	86	13	464
Hydraulic engine.....	J. B. Waring, J. F. Darrow, and F. Winters, jr.....	203,801	May 14, 1878	607	169	13	908
Hydraulic engine, Compound.....	O. C. Carpenter.....	210,915	Dec. 17, 1878	600	166	14	918
Hydraulic jack.....	R. H. and G. T. Lewis.....	201,114	Mar. 12, 1878	300	92	13	467
Hydraulic jack.....	M. Pennypacker.....	205,674	July 3, 1878	224	67	14	37
Hydraulic motor.....	J. M. Bois.....	200,245	Feb. 12, 1878	357	106	13	296
Hydraulic motor.....	W. B. Cass.....	207,945	Sept. 10, 1878	390	117 118	14	401
Hydraulic power-accumulator.....	W. D. Grimshaw.....	202,435	Apr. 16, 1878	622	182	13	695
Hydraulic power-accumulator.....	T. M. Maguire.....	202,660	Apr. 23, 1878	885	254	13	735
Hydraulic-power apparatus.....	E. M. Butz.....	204,654	June 11, 1878	257	74, 75	13	1049
Hydraulic press.....	A. B. Lawther.....	199,297	Jan. 15, 1878	600	175	13	109
Hydraulic press.....	J. G. Steen.....	202,292	Apr. 9, 1878	458	134	13	688
Hydrocarbon from fatty matters, Extracting.....	W. Adamson.....	203,980	May 21, 1878	804	231	13	941
Hydrocarbon generator and burner and gas-generator.....	C. Holland.....	203,828	May 21, 1878	646	182 183	13	921
Hydrocarbon generator, burner, and lighter.....	C. Holland.....	203,832	May 21, 1878	649	184 185	13	921
Hydrocarbon-vapor generator and burner.....	C. Holland.....	203,826	May 21, 1878	644	181 182	13	921
Hydrocarbon-vapor generator and burner.....	C. Holland.....	203,827	May 21, 1878	645	182	13	921
Hydrocarbon-vapor generator and burner.....	C. Holland.....	203,829	May 21, 1878	647	183	13	921
Hydrocarbon-vapor generator and burner.....	C. Holland.....	203,831	May 21, 1878	648	184	13	921
Hydrocarbon-vapor generator and burner and gas-generator.....	C. Holland.....	203,830	May 21, 1878	647	183	13	921
Hydrocarbons with air and burning the same, Apparatus for mixing.....	F. C. Mensinga.....	209,825	Nov. 12, 1878	318	94	14	727
Hydrometer-cup and thief combined.....	C. Cox.....	200,981	Mar. 5, 1878	156	51	13	439
Hydrotherapeutic apparatus.....	E. E. G. Bozerain.....	204,879	June 18, 1878	503	147	13	1086
I.							
Ice, Apparatus for forming sheets of.....	J. Gamgee.....	204,210	May 28, 1878	1077	307	13	980
Ice, Apparatus for making.....	D. L. Holden.....	207,278	Aug. 20, 1878	658	195	14	296
Ice, Apparatus for making.....	E. P. Lorch.....	207,290	Aug. 20, 1878	670	199	14	297
Ice, Apparatus for refrigerating the non-congealable liquid employed in the manufacture of.....	D. L. Holden.....	205,642	July 2, 1878	183	55	14	33
Ice-breaker.....	E. J. Creasey.....	209,463	Oct. 29, 1878	1110	323	14	659
Ice-cream freezer.....	T. J. Soden.....	199,476	Jan. 22, 1878	785	231	13	164
Ice-cream measure and mold.....	W. Clewell.....	209,751	Nov. 12, 1878	246	73	14	718
Ice-creepor.....	O. A. Childs.....	202,930	Apr. 30, 1878	1181	341	13	776
Ice-cutting apparatus.....	J. T. Martin.....	205,970	July 16, 1878	573	164	14	90
Ice-cutting apparatus.....	G. R. Pierpont.....	209,711	Nov. 5, 1878	188	56	14	706
Ice-elevator.....	R. G. Brown.....	207,848	Sept. 10, 1878	281	87	14	388
Ice-elevator.....	J. Maccomb.....	202,181	Apr. 9, 1878	347	102	13	652
Ice-house.....	J. Schneider.....	203,651	May 14, 1878	446	127 128	13	889
Ice in separated layers, Forming.....	A. C. Call.....	202,787	Apr. 23, 1878	1015	291	13	751
Ice-locomotive.....	H. Lainé.....	205,194	June 25, 1878	834	247	13	1134
Ice-machine.....	A. Albertson.....	198,831	Jan. 1, 1878	109	31	13	25
Ice-machine.....	J. Gamgee.....	208,304	Sept. 24, 1878	796	232	14	462
Ice-machine.....	J. Gamgee.....	208,305	Sept. 24, 1878	797	232	14	462
Ice-machines, Cell for the tanks of.....	J. Siddley and F. N. Mackay.....	206,627	July 30, 1878	1325	381	14	192
Ice-machines, Condenser for.....	J. Gamgee.....	208,454	Sept. 24, 1878	953	279	14	482
Ice-machines, Condenser for.....	D. L. Holden.....	205,641	July 2, 1878	182	54	14	32
Ice-machines, Congealing-plate for.....	J. P. Jones.....	202,265	Apr. 9, 1878	430	126	13	664
Ice, Method and apparatus for producing.....	D. L. Holden.....	205,643	July 2, 1878	184	55	14	33
Ice, Process and apparatus for making.....	J. Kyle.....	208,019	Sept. 17, 1878	480	144	14	418
Ice, Process and apparatus for making.....	J. Siddley and F. N. Mackay.....	206,626	July 30, 1878	1324	381	14	192
Ice, Process and apparatus for making.....	N. R. Allen.....	210,737	Dec. 10, 1878	384	105	14	882
Ice-tongs.....	W. E. Brigham.....	206,659	Aug. 6, 1878	2	1	14	207
Ice-tongs.....	C. B. Payson.....	207,204	Aug. 20, 1878	581	174	14	286
Ice-tool, Combined.....	W. H. Barwick.....	203,169	June 23, 1878	807	240	13	1131
Illuminating-burners, Combined globe and reflector for.....	L. Costa.....	203,057	June 18, 1878	679	199	13	1109
Illuminating-flame, Automatic device for raising and lowering.....	G. P. Ganster.....	201,237	Mar. 12, 1878	423	130	13	485
Illuminating fluids, Device for testing.....	S. S. Mann.....	204,235	May 28, 1878	1100	314	13	982

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Illuminating purposes, Oil-fixture for	B. Allen	210, 081	Dec. 17, 1878	674	185	14	927
Implement, Combination	C. A. Babcock	200, 590	Nov. 5, 1878	66	19	14	638
Incubator	J. Rabenberg	202, 467	Apr. 16, 1878	652	101	13	689
Incubators, &c., Regulating mechanism for	E. S. Kenwick	210, 559	Dec. 3, 1878	181	48, 40	14	847
Index	H. Beach	208, 143	Sept. 17, 1878	610	180	14	435
Index	F. L. Hutter	206, 022	July 16, 1878	624	180	14	97
Index	J. H. McKnight	201, 693	Mar. 26, 1878	916	280	13	566
Index, Revolving	L. U. Albers	209, 206	Oct. 22, 1878	842	243	14	617
Index-tag for books	E. M. Capen	204, 196	May 28, 1878	1065	303	13	973
Indexing apparatus	J. H. Carlisle and J. T. Taylor	209, 158	Oct. 22, 1878	792	230	14	611
Indexing books	J. Echols	200, 381	Feb. 19, 1878	513	151	13	328
Indicating the direction of the wind, Apparatus for	A. J. and F. E. Harris	202, 815	Apr. 23, 1878	1049	371	13	756
Indicator:							
See Car-indicator.	Speed-indicator.						
Cock-indicator.	Station-indicator.						
Fire-alarm indicator.	Time-indicator.						
Low-water indicator.	Water-indicator.						
Office-indicator.	Water-level indicator.						
Pressuro-gage indicator.							
Indicator	J. Freeman	202, 643	Apr. 23, 1878	869	249	13	734
Indicator	J. Tatham	207, 319	Aug. 20, 1878	696	208	14	701
Indicator and gage-cock	W. Starkey and O. P. Jackson	204, 630	June 4, 1878	207	66	13	1042
Indicator and seal-lock combined	E. B. Caton	198, 837	Jan. 1, 1878	114	33	13	26
Indicator-lock	J. H. Kinsman	210, 540	Dec. 3, 1878	163	43	14	844
Indicator-lock	L. S. Young and C. C. Gale	198, 901	Jan. 8, 1878	251	72	13	54
Ingot-mold	H. T. Babbitt	204, 783	June 11, 1878	379	113	13	1067
Ingot-mold	W. R. Jones	208, 605	Oct. 1, 1878	151	44	14	500
Ingot-mold stripper	T. James	199, 553	Jan. 22, 1878	867	254	13	100
Ingot, Treating cast-steel	B. E. Cammell and J. Duffield	205, 351	June 25, 1878	1001	296	13	1156
Inhaler	O. P. Barber	199, 140	Jan. 15, 1878	446	132	13	85
Inhaler	L. E. Felton	201, 659	Mar. 26, 1878	888	271	13	501
Injector	J. E. Bott	200, 220	Oct. 22, 1878	853	247	14	619
Injector	S. Fowden	199, 530	Jan. 22, 1878	847	247	13	156
Injector	J. D. Lynde	198, 891	Jan. 1, 1878	172	49	13	35
Injector	W. Sellers and J. S. Bancroft	208, 425	Sept. 24, 1878	921	270	14	478
Injector	M. D. Strickland	208, 437	Sept. 24, 1878	933	274	14	479
Injector and ejector, Combined atmospheric	J. H. Irwin	205, 650	July 2, 1878	194	58, 59	14	34
Injector for steam-boilers	D. Minich and G. F. Godley	210, 954	Dec. 17, 1878	641	178	14	923
Injectors of steamboat-boilers, Water-supply for	S. Rue	209, 517	Oct. 20, 1878	1168	339	14	667
Ink, Canceling and writing	H. and W. S. Richmond	203, 572	May 7, 1878	144	.....	13	840
Ink-well	A. Albee	208, 278	Sept. 24, 1878	770	225	14	458
Ink, Writing	G. A. Wells	199, 883	Jan. 29, 1878	1212	.....	13	221
Inking-pad	F. P. Hammond	204, 726	June 11, 1878	316	96	13	1060
Inkstand	G. Elsev	210, 192	Nov. 26, 1878	738	219	14	791
Inkstand	W. A. Hull	201, 240	Mar. 12, 1878	435	134	13	486
Inkstand	F. Klingspor, jr	204, 054	May 21, 1878	884	254	13	951
Inkstand	D. Mosman and R. L. Webb	203, 757	May 14, 1878	559	158	13	903
Inkstand	W. P. Speller	204, 388	May 28, 1878	1255	357	13	1002
Inkstand	H. G. Squires	200, 581	Feb. 10, 1878	708	208	13	356
Inkstand, Calendar	C. B. Howard	209, 160	Oct. 22, 1878	805	233	14	612
Inkstand, Calendar	F. Ratcliff	201, 831	Mar. 20, 1878	1039	323	13	567
Insect and bug gatherer	L. A. Walsworth and E. F. Merritt	205, 984	July 16, 1878	590	170	14	92
Insect and vermin fumigator	F. Hanson	200, 529	Feb. 19, 1878	657	193	13	350
Insect-destroyer	J. P. Ruhmann	206, 901	Aug. 13, 1878	271	82	14	243
Insect-destroyer	P. S. Ryan	207, 306	Aug. 20, 1878	684	203	14	290
Insect-exterminator	W. T. Daughtrey	200, 376	Feb. 19, 1878	508	150	13	327
Insect-powder blower	M. Mark	200, 924	Mar. 5, 1878	104	35	13	431
Insect-powder gun	W. Kennish	202, 830	Apr. 23, 1878	1067	305	13	758
Insect-powder injector	G. N. Giovanni	198, 807	Jan. 1, 1878	89	24	13	22
Insect-trap	F. Schreiber and A. Weigand	200, 574	Feb. 19, 1878	701	206	13	357
Insects by fumigation, Device for destroying	T. E. Bingham	199, 611	Jan. 20, 1878	953	277	13	181
Insects, Powder-duster for destroying	M. Moore	199, 733	Jan. 29, 1878	1072	314	13	190
Insecticide	J. C. Allan	206, 209	July 23, 1878	851	243	14	128
Insecticide	J. Barth, jr	207, 235	Aug. 20, 1878	613	.....	14	290
Insecticide compound	D. Maurer	205, 405	June 25, 1878	1055	.....	13	1163
Insole	M. Silverberg	202, 596	Apr. 10, 1878	799	230	13	715
Insoles and apparatus for manufacturing the same, Material for	C. Riewe	199, 226	Jan. 15, 1878	527	155	13	98
Instep-holder	J. H. Woodbury	200, 785	Feb. 20, 1878	933	274	13	390
Insulating induction-coils	D. Brooks	210, 957	Dec. 17, 1878	681	158	14	928
Insulating railway-tracks	L. Bastet	209, 215	Oct. 22, 1878	849	245	14	618
Insulating telegraphic conductors	D. Brooks	210, 986	Dec. 17, 1878	680	157	14	928
Insulating underground-telegraph wires	D. Brooks	199, 506	Jan. 22, 1878	818	230	13	152
Insulator for telegraph-wires	W. C. Johnson and S. E. Phillips	201, 615	Mar. 26, 1878	848	257	13	555
Insulator for telegraph-wires	J. Matthevman	201, 544	Mar. 19, 1878	758	230	13	528
Insulator, Telegraph	D. Brooks, jr	200, 124	Feb. 12, 1878	243	74	13	273
Intr-nching-tool	J. L. Buskett	199, 787	Jan. 20, 1878	1126	331	13	283
Invalid-chair	A. Iske	210, 125	Nov. 19, 1878	650	193	14	775
Invalid-chair	E. C. Jones	204, 231	May 28, 1878	1097	313	13	982
Invalid-chair	C. B. Sheldon	205, 002	June 18, 1878	626	184	13	1102
Invalid-chair	G. Wilson	200, 379	July 23, 1878	1049	302	14	153
Iron:							
See Carriage-clip iron.	Sad-iron.						
Carriage-seat-corner iron.	Shoemaker's lap-iron.						
Flat-iron.	Smoothering-iron.						
Fluting-iron.	Soldering-iron.						
Polishing-iron.	Whiffletree-iron.						
Iron, and furnace therefor, Melting and refining	W. Schleicher, jr	205, 692	July 2, 1878	246	73	14	40
Iron and steel, Manufacture of	I. L. Dell	198, 733	Jan. 1, 1878	1	.....	13	9
Iron and steel, Manufacture of	C. W. Siemens	205, 980	July 16, 1878	585	167, 168	14	92

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Iron, Case-hardening	G. S. Roberts	204, 840	June 11, 1878	445	.....	13	1074
Iron, &c., Decarbonizing malleable cast	A. R. Reynolds	210, 964	Dec. 17, 1878	652	180	14	925
Iron for case or surface hardening, Preparing	S. A. Conrad	204, 202	May 28, 1878	1069	.....	13	979
Iron from foundry refuse, Machine for separating	O. D. Woodruff	200, 638	Feb. 26, 1878	784	230	13	377
Iron from phosphorus, Freeing molten	H. S. Berge and J. Barnstorf	208, 561	Oct. 1, 1878	164	31	14	503
Iron gate	S. Rogers	210, 805	Dec. 10, 1878	455	128	14	892
Iron into chilling iron, Converting non-chilling	S. A. Ford	202, 530	Apr. 16, 1878	728	.....	13	708
Iron, Manufacture of	A. J. Moxham	210, 049	Nov. 19, 1878	567	170	14	764
Iron, Manufacture of cleaned and planished	W. D. Wood	210, 735	Dec. 10, 1878	380	.....	14	881
Iron, Manufacturing and piling	E. B. Edwards	209, 470	Oct. 29, 1878	1114	325	14	660
Iron, Preparation of peroxide of	R. and C. Steinau	206, 635	July 30, 1878	1333	.....	14	192
Iron vessels, Mechanism for forming	T. F. Rowland	206, 486	July 30, 1878	1179	338 339 340	14	174
Ironing and bosom board	G. C. Carnell	210, 449	Dec. 3, 1878	63	16	14	832
Ironing and fluting machine	C. F. Bailey and G. F. Perrenot	208, 283	Sept. 24, 1878	775	226	14	459
Ironing apparatus	A. K. Brettiell	204, 128	May 28, 1878	984	280	13	968
Ironing-board	G. E. Palmer	204, 755	June 11, 1878	343	104	13	1063
Ironing-board	E. J. Walfrom	200, 158	Feb. 12, 1878	277	83	13	284
Ironing-board and cutting-table combined	W. M. Foskett	201, 605	Mar. 26, 1878	838	254	13	554
Ironing-machine	W. and J. Coutie	199, 898	Feb. 5, 1878	7	3	13	294
Ironing-machine	J. Mason	209, 494	Oct. 29, 1878	1138	332	14	663
Ironing-machine	H. Monk	204, 594	June 4, 1878	165	54	13	1036
Ironing-machine	P. O'Thayno	210, 224	Nov. 26, 1878	771	228	14	795
Ironing-machine	H. E. Smith	208, 643	Oct. 1, 1878	189	55	14	514
Ironing-machine	T. S. Wiles	200, 011	Feb. 5, 1878	113	38	13	251
Ironing-machine	T. S. Wiles	200, 419	Feb. 19, 1878	549	162	13	333
Ironing-machine	E. L. Wilson	204, 777	June 11, 1878	370	111	13	1066
Ironing-table	R. Becker	201, 904	Apr. 2, 1878	46	12	13	605
Ironing-table	P. Dunbar	200, 648	Feb. 26, 1878	796	234	13	379
Ironing-table	J. A. Ence	204, 550	June 4, 1878	117	40	13	1029
Ironing-table	A. T. Gale	204, 019	May 21, 1878	852	243	13	947
Ironing-table	E. A. Hill	202, 438	Apr. 16, 1878	624	183	13	695
Ironing-table	W. C. McGill	207, 054	Aug. 13, 1878	411	127	14	261
Ironing-table	M. S. Prescott	200, 758	Feb. 26, 1878	909	268	13	396
Ironing-table	F. M. Smith	202, 877	Apr. 23, 1878	1115	320	13	764
Ironing-table	S. C. Terry	200, 584	Feb. 19, 1878	711	209	13	358
Irrigating apparatus	P. Dickson	208, 078	Sept. 17, 1878	537	161	14	426
Irrigating apparatus	C. D. Page	201, 442	Mar. 19, 1878	652	199	13	524
Irrigating device	J. A. Winebrenner	204, 695	June 11, 1878	279	87	13	1055
Irrigation, Artificial	J. A. Conway	202, 331	Apr. 16, 1878	518	152	13	680
Ivory and similar substances, Silicious material to imitate	J. W. and C. M. Hyatt	201, 348	Mar. 19, 1878	560	.....	13	511
<b>J.</b>							
Jack:							
See Boot-jack.	Hydraulic jack.						
Boot and shoe jack.	Lifting-jack.						
Carriage-jack.	Shoemaker's jack.						
Flooring-jack.	Wagon-jack.						
Jacket can	F. C. Wilson	204, 119	May 21, 1878	952	273	13	960
Jacketed can	W. S. Dyer	204, 718	June 11, 1878	306	94	13	1059
Jacketed can and vent for oil	J. S. Lester	207, 046	Aug. 13, 1878	408	125	14	200
Jail-bar	C. J. Coe	206, 390	July 30, 1878	1078	308	14	161
Jail-cell	J. S. Thomas	199, 879	Jan. 29, 1878	1209	355	13	220
Japanning	M. Bray	199, 504	Jan. 22, 1878	814	238	13	151
Jar:							
See Fruit-jar.	Preserve-jar.						
Milk-jar.							
Jelly-glass	J. J. Johnston	209, 813	Nov. 12, 1878	307	91	14	726
Jet-heater	W. Howarth	206, 453	July 30, 1878	1146	328	14	170
Jewel-box	E. H. Zoepfel	209, 848	Nov. 12, 1878	346	103	14	731
Jewel-casket	H. Berry	203, 106	Apr. 30, 1878	1347	292	13	798
Jewel-casket	A. Conradt	208, 373	Sept. 24, 1878	864	252	14	471
Jewel-casket	A. Conradt	210, 012	Nov. 19, 1878	532	160	14	759
Jewelers' dies, Swage for forming	G. Sisson	202, 597	Apr. 16, 1878	790	230	13	716
Jewelers' findings, Manufacture of	G. H. Fuller	208, 230	Sept. 24, 1878	715	210	14	452
Jewelry, Extension-ring for	G. O. Street	203, 792	May 14, 1878	507	166	13	907
Jewelry-fastening	W. P. Dolloff	206, 777	Aug. 6, 1878	123	39	14	222
Jewelry, Manufacturing pin-tongues for	W. H. Hathaway	201, 244	Mar. 12, 1878	431	132	13	486
Jewelry, Wire trimming for	L. Heckmann	204, 149	May 28, 1878	1009	287	13	971
Jibs, Device for reefing	E. Rowell, 2d	200, 766	Feb. 26, 1878	915	269	13	397
<b>Joint:</b>							
See Ball-joint.	Pitman-joint.						
Bracket-joint.	Rail-joint.						
Carriage-top joint.	Railway-rail joint.						
Felly-joint.	Sidewalk-joint.						
Fishing-rod joint.	Swivel-joint.						
Hinge-joint.	Water-pipe joint.						
Pipe-joint.	Wooden-pipe joint.						
Joint-flanges, Machine for forming	F. P. Cady	207, 342	Aug. 27, 1878	735	220	14	311
Jointer-clamp	M. D. Slocum	207, 451	Aug. 27, 1878	851	251	14	325
Joist-shoe	J. R. Payson	199, 098	Jan. 8, 1878	384	114	13	76
Journal	R. Macdonald	208, 983	Oct. 15, 1878	580	169	14	578
Journal and box therefor, Shaft	W. H. Atkinson	202, 395	Apr. 16, 1878	580	170	13	689
Journal-bearing	D. M. Finlayson	205, 256	June 25, 1878	896	265	13	1143
Journal-bearing	W. W. Smalley	209, 684	Oct. 15, 1878	696	202	14	593
Journal-bearing	J. Sweeney	199, 669	Jan. 29, 1878	1015	296	13	190
Journal-bearing, Anti-friction	S. Hill	208, 095	Sept. 17, 1878	552	165	14	428
Journal-bearings, Composition for	J. Johnson	208, 524	Oct. 1, 1878	68	21	14	498
Journal-bearings, Composition for	J. Johnson	209, 170	Oct. 22, 1878	806	.....	14	612
Journal-box	C. T. Porter	201, 197	Mar. 12, 1878	377	117	13	479
Journal-box, Anti-friction	W. Tucker	206, 649	July 30, 1878	1351	389	14	194
Journal box, Car	F. M. Alexander	208, 947	Oct. 15, 1878	542	159	14	572
Journal for car-axles, shafting, &c	H. Wakeman	200, 492	Feb. 19, 1878	620	182	13	344
Journal for shafts and axles	P. Sweeney	199, 121	Jan. 8, 1878	413	121	13	80
Journals and axles, Anti-friction bearing for	T. H. King	202, 034	Apr. 2, 1878	172	50	13	624

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K.							
Kerite, Compound for the manufacture of .....	A. G. Day .....	210,406	Dec. 3, 1878	16	.....	14	827
Kerite from gums and oils, Manufacture of .....	A. G. Day .....	210,408	Dec. 3, 1878	18	.....	14	827
Kerite, Manufacture of .....	A. G. Day .....	210,409	Dec. 3, 1878	20	.....	14	827
Kerite, Preparing vegetable oils for the manufacture of .....	A. G. Day .....	210,410	Dec. 3, 1878	21	.....	14	827
Kettle-cover .....	C. M. Orton .....	209,707	Nov. 5, 1878	184	54	14	705
Kettle, Dinner .....	J. S. Hagerty .....	204,817	June 11, 1878	413	121	13	1071
Kettle, Dinner .....	B. F. Stockford .....	205,769	July 9, 1878	343	100	14	56
Key:							
<i>See</i> Accordion-key.      Master-key.							
Extension-key.      Telegraph-key.							
Lock-key.      Watch-key.							
Key-board, Transposing .....	C. A. Agren .....	200,640	Feb. 26, 1878	786	231	13	378
Key-fastener .....	J. W. Johnson .....	203,161	Apr. 30, 1878	1411	411	13	807
Key-fastener .....	J. McCully .....	200,404	Feb. 19, 1878	534	158	13	331
Key-fastener .....	J. T. White .....	201,373	Mar. 19, 1878	583	179	13	514
Key-hole guard .....	W. H. Avery .....	201,085	Mar. 12, 1878	269	83	13	463
Key-retainer .....	J. W. Johnson .....	199,447	Jan. 22, 1878	754	{ 221 222 }	13	142
Key-seat or pinion-cutter .....	J. W. Post .....	208,492	Oct. 1, 1878	37	12	14	494
Keys, Device for extracting .....	P. A. Oliver .....	202,457	Apr. 16, 1878	643	188	13	698
Kiln:							
<i>See</i> Brick-kiln.      Pottery-kiln.							
Drying-kiln.      Tile or brick kiln.							
Lime-kiln.							
Kiln for drying vegetables, &c. ....	E. Hundhausen .....	210,124	Nov. 10, 1878	649	{ 192 193 }	14	775
King-bolt .....	W. H. Morrison .....	205,891	July 9, 1878	474	135	14	72
Kitchen-cabinet .....	W. H. Stewart .....	209,936	Nov. 12, 1878	434	131	14	742
Kitchen-table .....	J. Bliss .....	200,891	Mar. 5, 1878	74	26	13	426
Kitchen-table .....	G. W. Williams .....	208,446	Sept. 24, 1878	943	277	14	460
Knap-sack .....	H. C. Merriam .....	204,066	May 21, 1878	897	257	13	953
Kneading machine, Dough .....	L. Dursand .....	200,183	Feb. 12, 1878	302	90	13	258
Knife and fork handle, Enamel-coated .....	T. S. Ransom .....	199,743	Jan. 20, 1878	1081	.....	13	209
Knife and match-safe, Combined .....	J. G. Rahner .....	209,359	Oct. 29, 1878	1003	292	14	643
Knife and measuring-rule, Combined .....	G. Waldman and D. Frank .....	208,654	Oct. 1, 1878	206	59	14	516
Knife-blades, Manufacture of .....	S. M. Moore .....	202,282	Apr. 9, 1878	448	131	13	608
Knife-cleaner and sharpener .....	C. A. Heegaard .....	199,976	Feb. 5, 1878	84	28	13	246
Knife-cleaning apparatus .....	I. Guex .....	207,514	Aug. 27, 1878	919	270	14	333
Knife-handle, Table .....	W. H. Brown and I. Osgood .....	209,649	Nov. 5, 1878	127	37	14	698
Knife-scales, Manufacture of .....	W. Baker .....	206,910	Aug. 13, 1878	287	87	14	245
Knife-scourer .....	S. K. Luce .....	200,550	Feb. 19, 1878	678	199	13	333
Knife-scourer .....	N. A. Wierman .....	202,770	Apr. 23, 1878	097	2-7	13	749
Knife-scourer and polisher .....	A. E. McDonald .....	199,457	Jan. 22, 1878	768	225	13	144
Knife-sharpener .....	D. Jr. and A. Gundelfinger .....	205,077	June 18, 1878	099	207	13	1111
Knitting-machine .....	S. Huff .....	210,329	Nov. 26, 1878	882	250	14	809
Knitting-machine .....	T. Langham .....	201,024	Mar. 5, 1878	203	64	13	446
Knitting-machine .....	W. T. Lemon .....	202,840	Apr. 23, 1878	1076	{ 307 308 }	13	739
Knitting-machine .....	W. H. McNary .....	205,663	July 2, 1878	209	62, 63	14	36
Knitting-machine .....	A. Reichenbach .....	201,447	Mar. 19, 1878	657	{ 200 201 }	13	325
Knitting-machine .....	E. Tiffany .....	198,757	Jan. 1, 1878	29	7, 8, 9	13	12
Knitting-machine cam .....	F. Denzler .....	204,426	June 4, 1878	11	5	13	1014
Knitting-machine cam .....	W. J. McDevitt .....	202,567	Apr. 16, 1878	768	222	13	712
Knitting-machine, Circular .....	G. A. Leighton .....	200,463	Feb. 19, 1878	591	{ 174 175 }	13	340
Knitting-machine, Cylinder .....	A. Groiss .....	207,029	Aug. 13, 1878	389	120	14	238
Knitting-machine narrowing mechanism .....	W. Aiken .....	204,648	June 11, 1878	231	73	13	1049
Knitting-machine narrowing mechanism .....	W. Aiken .....	205,167	June 25, 1878	805	239	13	1131
Knitting-machine needle .....	G. H. and H. Adams .....	210,653	Dec. 10, 1878	299	82	14	871
Knitting-machine needle .....	S. Peberdy .....	206,334	July 23, 1878	1021	292	14	136
Knitting-machine stopping mechanism .....	S. Arnold .....	205,236	June 25, 1878	986	292	13	1154
Knitting-machines, Loop-wheel for .....	H. M. Mellor .....	199,923	Feb. 5, 1878	36	12	13	238
Knitting-machines, Yarn-delivery attachment for .....	A. Paul .....	201,629	Mar. 26, 1878	861	262	13	357
Knitting stockings .....	B. F. Shaw .....	200,225	Feb. 12, 1878	339	102	13	294
Knob alarm, Door .....	G. W. McGovern .....	201,117	Mar. 12, 1878	304	93	13	468
Knob and shank attachment, Door .....	P. Brady .....	201,906	Apr. 2, 1878	48	13	13	005
Knob attachment .....	A. Dickerman .....	205,061	June 18, 1878	683	200	13	1109
Knob attachment .....	W. Stewart .....	200,880	Mar. 5, 1878	65	23	12	425
Knob attachment .....	E. St. John .....	204,921	June 18, 1878	548	150	13	1091
Knob attachment .....	A. E. Young .....	205,941	July 9, 1878	520	151	14	80
Knob attachment, Door .....	J. F. Peacock .....	208,924	Oct. 15, 1878	518	150	14	569
Knob, Door .....	T. Taylor .....	201,719	Mar. 26, 1878	941	289	13	769
Knob extension, Door .....	A. E. Young .....	199,771	Jan. 29, 1878	1107	325	13	205
Knobs, Attaching shanks to door .....	J. W. Haines .....	200,450	Feb. 19, 1878	579	171	13	353
Knobs to their shanks, Fastening porcelain and other .....	E. Parker .....	206,605	July 30, 1878	1307	376	14	180
L.							
Label-cutting machine .....	H. H. Frary and L. Hellman .....	201,104	Mar. 12, 1878	287	89	13	406
Label-holder .....	C. M. Bright .....	200,688	Feb. 26, 1878	839	247	13	255
Label-holder .....	S. L. Lewis .....	201,028	Apr. 2, 1878	68	18	13	008
Label-holder .....	A. A. Noyes .....	209,071	Oct. 15, 1878	664	108	14	591
Labels, &c., Machine for counting .....	C. E. Sawyer .....	204,097	May 21, 1878	932	{ 266 267 }	13	957
Lacing-hook .....	E. Maynz .....	202,564	Apr. 16, 1878	764	221	13	712
Ladder .....	F. A. Copeland .....	204,295	May 28, 1878	1160	351	13	1599
Ladder .....	A. R. W. Knight .....	199,556	Jan. 22, 1878	870	254	13	160
Ladder .....	A. H. Middleton .....	198,897	Jan. 1, 1878	177	51	13	36
Ladder .....	J. E. Richard .....	210,620	Dec. 10, 1878	273	74	14	868
Ladder and trestle combined .....	T. Mical .....	206,470	July 30, 1878	1164	334	14	172

*Alphabetical list of inventions—Continued.*

Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &c.	Vol.	Page.
Ladder, Elevating .....	P. Ruten .....	202, 876	Apr. 23, 1878	1114	320	13	764
Ladder, Extension .....	G. Carlton .....	190, 514	Jan. 22, 1878	826	241	13	153
Ladder, Extension .....	G. M. Evans .....	802, 326	Apr. 16, 1878	612	179	13	694
Ladder, Extension .....	L. Hauerwas .....	208, 089	Sept. 17, 1878	548	164	14	428
Ladder, Extension .....	D. D. Hayes .....	202, 169	Apr. 9, 1878	337	98	13	650
Ladder, Extension .....	J. W. Pine .....	260, 475	Feb. 19, 1878	604	178	13	342
Ladder, Extension .....	J. S. Smith and J. M. Davis .....	201, 844	Mar. 26, 1878	1072	326	13	588
Ladder, Extension step .....	C. E. Doty and G. W. Flint .....	210, 018	Nov. 19, 1878	537	161	14	760
Ladder, Fire-escape .....	D. E. Gibbons .....	204, 893	June 18, 1878	518	151	13	1088
Ladder, Fireman's .....	R. Gilchrist .....	209, 250	Oct. 22, 1878	879	255 256	14	623
Ladder for gathering fruit, Portable .....	L. H. Titus .....	210, 168	Nov. 19, 1878	696	207	14	781
Ladder, Step .....	J. J. Brady .....	204, 191	May 28, 1878	1060	301	13	977
Ladder, Step .....	F. Dyer .....	203, 327	May 7, 1878	97	28	13	833
Ladder, Step .....	M. Medart .....	199, 922	Feb. 5, 1878	36	11	13	238
Ladder, Step .....	I. Q. Sherwood .....	203, 561	May 14, 1878	365	103	13	878
Ladder, Step .....	C. G. Udell .....	199, 004	Jan. 8, 1878	295	86	13	61
Ladder-truss, Adjustable .....	G. H. Fox .....	204, 962	June 18, 1878	588	172	13	1097
Ladder, Wire .....	J. Flinn .....	200, 524	Feb. 19, 1878	651	192	13	349
Ladder, Wire-rope .....	A. Elton .....	199, 967	Feb. 5, 1878	77	25	13	245
Ladle: See Metal-founder's ladle.							
Ladle for molten metal, Apparatus for mounting and transporting.	W. Aikin and W. W. Drummond	202, 321	Apr. 16, 1878	509	149	13	679
Lamp .....	E. J. Blackham .....	199, 254	Jan. 15, 1878	552	162	13	102
Lamp .....	W. Bockel .....	202, 663	Apr. 23, 1878	920	263	13	739
Lamp .....	J. S. Butler .....	204, 193	May 28, 1878	1062	302	13	977
Lamp .....	F. Carrier .....	200, 373	Feb. 19, 1878	506	149	13	327
Lamp .....	C. M. Cass .....	201, 867	Apr. 2, 1878	10	3	13	600
Lamp .....	G. H. Chinneck .....	202, 234	Apr. 9, 1878	399	116	13	639
Lamp .....	H. Craighead .....	202, 236	Apr. 9, 1878	401	117	13	660
Lamp .....	E. S. Drake .....	204, 303	May 28, 1878	1168	333	13	991
Lamp .....	E. S. Drake .....	204, 304	May 28, 1878	1169	333	13	991
Lamp .....	E. S. Drake .....	204, 305	May 28, 1878	1169	333	13	991
Lamp .....	E. S. Drake .....	204, 306	May 28, 1878	1170	334	13	991
Lamp .....	G. F. Geer .....	199, 699	Jan. 20, 1878	1043	304	13	124
Lamp .....	P. Haedicke .....	203, 443	May 7, 1878	222	63	13	850
Lamp .....	H. L. Ives .....	208, 396	Sept. 24, 1878	888	259	14	474
Lamp .....	H. P. Nichols .....	205, 293	June 25, 1878	842	250	13	1186
Lamp .....	F. G. Palmer .....	204, 364	May 28, 1878	1233	351	13	999
Lamp .....	F. Ratcliff .....	204, 608	June 4, 1878	182	58	13	1058
Lamp .....	N. L. Rigby .....	203, 474	May 7, 1878	146	42	13	840
Lamp .....	C. H. Scholle .....	207, 369	Aug. 27, 1878	762	227	14	815
Lamp .....	C. F. Spencer .....	204, 457	June 4, 1878	42	13	13	1018
Lamp .....	C. F. Spencer .....	207, 314	Aug. 20, 1878	692	206	14	390
Lamp .....	F. B. Squire .....	201, 565	Mar. 19, 1878	780	237	13	541
Lamp .....	J. A. Stephens and J. Lameraux .....	206, 904	Aug. 13, 1878	273	83	14	244
Lamp .....	J. J. Thomas .....	207, 460	Aug. 27, 1878	860	254	14	326
Lamp .....	W. M. and J. J. Walton .....	202, 681	Apr. 23, 1878	908	260	13	738
Lamp .....	C. S. Westland .....	206, 061	July 16, 1878	666	192	14	102
Lamp .....	D. Whiteford .....	203, 971	May 21, 1878	795	228	13	940
Lamp, Alcohol .....	J. W. Cooper .....	201, 913	Apr. 2, 1878	55	14	13	606
Lamp and lantern, Tubular .....	T. Walton and A. W. Paull .....	206, 281	July 23, 1878	932	264	14	139
Lamp and stove, Combined .....	R. R. Moore .....	206, 960	Aug. 13, 1878	323	98	14	250
Lamp-black apparatus .....	J. M. Cornell .....	210, 672	Dec. 10, 1878	317	87	14	874
Lamp-black, Machine for making .....	J. K. Hallock and E. R. Blood .....	205, 955	July 16, 1878	558	159	14	88
Lamp-bracket .....	B. A. Neisser .....	205, 291	June 25, 1878	935	277	13	1148
Lamp-bracket .....	J. J. Nolan .....	200, 082	Feb. 5, 1878	195	61	13	203
Lamp-burner .....	H. C. Alexander .....	201, 730	Mar. 26, 1878	956	293	13	572
Lamp-burner .....	L. J. Atwood .....	200, 015	Feb. 5, 1878	120	39	13	252
Lamp-burner .....	E. J. Blackham .....	210, 236	Nov. 26, 1878	783	232	14	796
Lamp-burner .....	T. M. Brintnall .....	201, 221	Mar. 12, 1878	402	124	13	482
Lamp-burner .....	F. and C. Buehrig .....	204, 478	June 4, 1878	60	20	13	1021
Lamp-burner .....	S. C. Catlin .....	199, 144	Jan. 15, 1878	451	133	13	86
Lamp-burner .....	W. W. Eastman .....	208, 801	Oct. 8, 1878	374	106	14	546
Lamp-burner .....	E. P. Follett .....	206, 432	July 30, 1878	1123	322	14	167
Lamp-burner .....	J. G. Hallas .....	208, 369	Sept. 24, 1878	802	234	14	463
Lamp-burner .....	B. Hempstead .....	208, 818	Oct. 8, 1878	390	111	14	548
Lamp-burner .....	G. Hillegass .....	203, 043	Apr. 30, 1878	1289	373	13	790
Lamp-burner .....	C. F. A. Hinrichs and C. Reistle .....	198, 981	Jan. 8, 1878	271	78	13	58
Lamp-burner .....	C. F. A. Hinrichs and C. Reistle .....	203, 342	May 7, 1878	110	32	13	855
Lamp-burner .....	H. L. Ives .....	211, 021	Dec. 17, 1878	718	198	14	932
Lamp-burner .....	W. O. Lincoln .....	207, 048	Aug. 13, 1878	405	126	14	260
Lamp-burner .....	A. T. Nord .....	200, 627	Feb. 26, 1878	771	227	13	375
Lamp-burner .....	R. B. Perkins .....	202, 589	Apr. 16, 1878	782	225	13	714
Lamp-burner .....	H. C. Scott .....	199, 109	Jan. 8, 1878	394	118	13	78
Lamp-burner .....	H. C. Scott .....	204, 620	June 4, 1878	200	64	13	1040
Lamp-burner .....	J. P. Smithers .....	208, 429	Sept. 24, 1878	927	271	14	479
Lamp-burner .....	T. G. Springer .....	208, 646	Oct. 1, 1878	195	56	14	515
Lamp-burner .....	E. E. Townsend .....	202, 074	Apr. 2, 1878	213	62	13	629
Lamp-burner .....	W. R. Underhill .....	207, 372	Aug. 27, 1878	764	228	14	315
Lamp-burner .....	H. W. Vaughan .....	210, 375	Nov. 26, 1878	938	272	14	817
Lamp-burner .....	W. N. Weedon .....	207, 576	Aug. 27, 1878	996	291	14	343
Lamp-burner .....	W. N. Weedon .....	209, 738	Nov. 5, 1878	221	67	14	710
Lamp-burner, Argand .....	C. M. Lungren .....	201, 805	Mar. 26, 1878	1031	315	13	583
Lamp-burner, Argand .....	H. Preise .....	205, 134	June 18, 1878	754	224	13	1119
Lamp-bowl .....	F. Rhind .....	209, 077	Oct. 15, 1878	690	200	14	592
Lamp-chimney .....	E. S. Drake .....	201, 509	Mar. 19, 1878	719	219	13	534
Lamp-chimney .....	H. S. Field .....	199, 815	Jan. 29, 1878	1152	338	13	211
Lamp-chimney .....	S. B. Inglis .....	207, 280	Aug. 20, 1878	661	196	14	296
Lamp-chimney .....	W. W. Judson .....	206, 796	Aug. 6, 1878	145	45	14	224
Lamp-chimney .....	E. R. Roswell .....	209, 408	Feb. 19, 1878	538	159	13	332
Lamp-chimney and shade, Combined .....	T. B. Atterbury .....	209, 542	Nov. 5, 1878	4	2	14	681



*Alphabetical list of inventions—Continued.*

Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw.	Vol.	Page.
Lamp chimney, Nursery.	E. Mercier.	208,916	Oct. 15, 1878	508	147	14	508
Lamp-chimneys, Attachments for.	L. D. B. Shaw.	200,879	Mar. 5, 1878	65	23	13	425
Lamp-chimneys, &c., Machine for flaring and crimping.	C. H. W. Ruhe.	209,425	Oct. 29, 1878	1069	310	14	653
Lamp-chimneys, Manufacture of glass.	E. D. Dithridge.	205,478	July 2, 1878	15	5	14	11
Lamp, Electric.	C. F. Brush.	203,411	May 7, 1878	181	52, 53	13	845
Lamp, Electric.	H. S. Maxim.	208,252	Sept. 24, 1878	740	216 217	14	455
Lamp, Electric.	W. E. Sawyer and A. Man.	205,144	June 18, 1878	767	2, 7	13	1120
Lamp, Electric.	W. E. Sawyer and A. Man.	210,809	Dec. 10, 1878	450	129	14	802
Lamp, Electrical.	E. Birgin.	206,083	July 16, 1878	684	198	14	164
Lamp-extinguisher.	W. S. Asbury.	199,249	Jan. 15, 1878	547	161	13	101
Lamp-extinguisher.	A. Brandon.	200,955	Nov. 19, 1878	467	141	14	751
Lamp-extinguisher.	A. Hall.	201,411	Mar. 19, 1878	625	191	13	520
Lamp-extinguisher.	F. Rhind.	210,878	Dec. 17, 1878	548	154	14	912
Lamp-extinguisher.	C. W. Soule.	199,754	Jan. 29, 1878	1090	320	13	202
Lamp-extinguisher.	L. W. Swem.	201,570	Mar. 19, 1878	785	239	13	542
Lamp-extinguisher.	K. G. Funk.	202,076	Apr. 2, 1878	214	63	13	629
Lamp-extinguisher.	K. G. Funk.	202,077	Apr. 2, 1878	216	63	13	629
Lamp-filler.	H. and A. T. Hatch.	190,290	Jan. 15, 1878	592	173	13	164
Lamp-fixture, Extension.	J. A. Everts.	206,550	July 30, 1878	1243	357	14	182
Lamp for cooking.	H. S. Fifield.	204,144	May 28, 1878	1002	285	13	970
Lamp for light-houses, Self-lighting.	J. Forrest.	204,806	June 11, 1878	401	117 118	13	1009
Lamp-globe.	H. H. Hulburt.	211,018	Dec. 17, 1878	714	197	14	603
Lamp-globe.	T. Walton.	201,072	Mar. 5, 1878	250	79	13	433
Lamp-globe, Street.	F. Senour.	200,473	Feb. 19, 1878	603	177	13	343
Lamp, Hydrocarbon.	C. E. Ball.	205,943	July 16, 1878	545	155	14	87
Lamp, Hydrocarbon-gas.	W. R. Park.	204,448	June 4, 1878	33	11	13	1017
Lamp, Hydrostatic.	T. G. Goodfellow.	206,313	July 23, 1878	969	275	14	144
Lamp-lighter.	F. G. Stephenson.	209,620	Nov. 5, 1878	162	30	14	694
Lamp-lighting and extinguishing device.	J. Koontz.	210,356	Nov. 26, 1878	891	261	14	810
Lamp-lighting device, Automatic.	F. G. Stephenson.	207,317	Aug. 20, 1878	694	207	14	200
Lamp, Miner's.	W. Roberts.	200,082	Oct. 15, 1878	695	201	14	582
Lamp, Miner's.	J. C. Smythe.	204,628	June 4, 1878	206	66	13	1041
Lamp, Oil.	W. H. Garlick.	190,532	Jan. 22, 1878	849	243	13	154
Lamp, Oil chamber.	H. T. Hanks.	199,201	Jan. 15, 1878	566	149	13	45
Lamp, Oil cook-stove.	H. L. Howse.	200,913	Mar. 5, 1878	93	32	13	429
Lamp or lantern.	J. Felt.	205,181	June 25, 1878	818	243	13	1133
Lamp or lantern.	C. H. Rockwell.	205,422	June 25, 1878	1072	317	13	1165
Lamp post, Street.	J. G. Miner.	208,326	Sept. 24, 1878	818	239	14	465
Lamp regulator, Street.	A. W. Porter.	203,769	May 14, 1878	571	160	13	964
Lamp-reservoirs, Air-vent for street.	I. Stead.	209,935	Nov. 12, 1878	433	131	14	742
Lamp, Self-extinguishing.	F. Rhind.	200,078	Oct. 15, 1878	691	209	14	592
Lamp, Self-lighting.	H. W. Covert.	208,226	Sept. 24, 1878	709	209	14	452
Lamp, Self-lighting.	E. G. Haller.	203,145	Apr. 30, 1878	1391	406 407	13	804
Lamp-shade.	G. H. Chinnock.	202,232	Apr. 9, 1878	397	116	13	639
Lamp shade and base combined.	G. H. Chinnock.	202,233	Apr. 9, 1878	398	116	13	639
Lamp shade and chimney combined.	S. W. Fowler.	199,050	Jan. 8, 1878	338	99	13	63
Lamp-shade cover.	F. L. Cutter.	190,209	Jan. 15, 1878	573	167	12	105
Lamp, Ship.	R. Hitchcock.	205,640	July 2, 1878	180	54	14	512
Lamp, Shoemaker's.	A. Roscnstjerna.	201,358	Mar. 19, 1878	570	175	13	812
Lamp socket and stand.	J. Gallinger.	205,376	June 25, 1878	1027	304	13	1159
Lamp-stand.	R. S. Merrill.	201,206	Mar. 12, 1878	454	149	13	489
Lamp, Street.	H. S. Belden.	203,237	May 7, 1878	2	1	13	821
Lamp, Street.	J. Bird.	205,607	July 2, 1878	147	45	14	23
Lamp, Street.	A. Hoer.	200,297	Feb. 12, 1878	415	123	13	365
Lamp, Street.	J. Irwin.	206,573	July 30, 1878	1274	306	14	139
Lamp, Street.	F. H. Shepherd.	207,156	Aug. 20, 1878	510	154	14	277
Lamp, Street.	W. R. Underhill.	207,371	Aug. 27, 1878	763	228	14	315
Lamp, Student.	S. C. Catlin.	208,293	Sept. 24, 1878	785	229	14	409
Lamp, Student.	F. W. Platt.	200,933	Mar. 5, 1878	111	37	13	433
Lamp, Time-indicating night.	H. Behn, sr.	201,864	Apr. 2, 1878	6	2	13	599
Lamp, Vapor-burning.	J. S. Wood.	207,471	Aug. 27, 1878	869	257	14	327
Lamp-wick.	L. Hellman.	208,310	Sept. 24, 1878	804	234	14	463
Lamp-wick.	O. Mayo.	202,358	Apr. 16, 1878	546	100	13	684
Lamp-wick.	C. C. Richmond.	203,373	May 7, 1878	145	42	13	849
Lamp-wick.	H. C. Scott.	204,621	June 4, 1878	200	64	13	1041
Lamp-wick.	W. D. Smith.	200,696	Feb. 5, 1878	266	65	13	265
Lamp-wick attachment.	A. Schreiber.	200,194	Oct. 22, 1878	831	240	14	610
Lamp-wick measurer and cutter.	G. Washington.	198,864	Jan. 1, 1878	143	41	13	31
Lamp-wick raiser.	J. Hinks.	203,542	May 14, 1878	341	97, 98	13	870
Lamps, &c., Device for lighting and extinguishing.	S. C. Sweet.	207,995	Sept. 10, 1878	441	132	14	409
Lamps, Magic lantern for street.	C. M. Keefer and R. S. Orsburn.	209,272	Oct. 22, 1878	903	263	14	629
Lamps, &c., Night-chimney for.	J. F. Rose.	159,578	Jan. 22, 1878	890	261	13	163
Lamps, Regulator for electrical.	H. S. Maxim.	208,253	Sept. 24, 1878	742	217	14	455
Lance, Bomb.	D. Kelleher.	201,793	Mar. 26, 1878	1020	311 312	13	581
Lance, Bomb.	D. Kelleher.	201,794	Mar. 26, 1878	1021	312	13	581
Land-leveler.	S. Griffin.	206,943	Aug. 13, 1878	308	94	14	248
Land-roller.	R. W. Bunting.	199,508	Jan. 22, 1878	819	239	13	133
Land-roller.	A. H. Ufford.	201,368	Mar. 19, 1878	578	178	13	514
Land-roller and clod-crusher.	W. Gutenberg.	199,536	Jan. 22, 1878	853	249	13	157
Land-roller and clod-crusher combined.	R. A. Rynerson.	210,150	Nov. 19, 1878	677	201	14	779
Land-roller, harrow, and grain-drill combined.	S. F. Reynolds.	198,778	Jan. 1, 1878	60	15	13	17
Lantern.	L. J. Atwood.	206,917	Aug. 13, 1878	285	87	14	245
Lantern.	L. J. Atwood.	206,918	Aug. 13, 1878	286	87	14	245
Lantern.	A. L. Baron, E. F. Cash, and D. Rankin.	202,779	Apr. 23, 1878	1005	289	13	750
Lantern.	A. L. Baron.	208,142	Sept. 17, 1878	608	180	14	435
Lantern.	G. A. Beidler.	208,785	Oct. 8, 1878	350	100	14	543
Lantern.	E. F. Cash.	207,104	Aug. 20, 1878	481	145	14	273
Lantern.	E. F. Cash and A. L. Baron.	207,713	Sept. 3, 1878	129	40	14	393
Lantern.	C. W. Colony.	200,176	Feb. 12, 1878	294	88	13	267

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Lantern	J. A. Cowles	267,715	Sept. 3, 1878	125	41	14	366
Lantern	J. A. Cowles	267,716	Sept. 3, 1878	135	41	14	366
Lantern	A. M. Duburn	203,716	May 14, 1878	517	146	13	807
Lantern	C. T. Ham	207,516	Aug. 17, 1878	921	271	14	334
Lantern	H. W. Hayden	209,729	Aug. 6, 1878	73	24	14	216
Lantern	J. H. Irwin	205,648	July 2, 1878	191	58	14	33
Lantern	J. H. Irwin	205,649	July 2, 1878	193	58	14	34
Lantern	J. H. Irwin	205,749	July 9, 1878	322	94	14	53
Lantern	J. H. Irwin	209,051	Oct. 15, 1878	661	191	14	588
Lantern	H. Nahe	210,624	Dec. 10, 1878	267	72	14	867
Lantern	J. W. Orphy	211,040	Dec. 17, 1878	755	207	14	936
Lantern	T. B. Osborne	200,565	Feb. 19, 1878	692	203	13	355
Lantern	A. W. Paull	206,478	July 30, 1878	1172	336	14	173
Lantern	A. W. and J. V. Paull	208,421	Sept. 24, 1878	915	267	14	477
Lantern	A. W. Paull	208,422	Sept. 24, 1878	918	268	14	477
Lantern	A. W. Paull	209,188	Oct. 22, 1878	825	238	14	615
Lantern	E. B. Requa	209,921	Nov. 12, 1878	416	125	14	741
Lantern	E. S. Ritchie	207,625	Sept. 3, 1878	41	13	14	554
Lantern	C. J. Swedberg	204,261	May 28, 1878	1126	322	13	986
Lantern	E. Tufts	209,308	Oct. 22, 1878	997	273	14	630
Lantern	C. H. Viereck	207,088	Aug. 13, 1878	444	137	14	205
Lantern and lamp	J. H. Ewing and E. L. Bill	210,602	Dec. 10, 1878	242	66, 67	14	804
Lantern and lamp	J. Morgan and T. Walton	208,112	Sept. 17, 1878	571	171	14	430
Lantern, Gelatine	F. J. and G. A. Witcher	202,687	Apr. 23, 1878	914	261	13	738
Lantern, Railway	M. M. Buck	201,741	Mar. 26, 1878	967	296	13	573
Lantern, Signal	S. Coxon	206,393	Aug. 13, 1878	298	91	14	247
Lantern, Signal	J. H. Ewing and E. L. Bill	205,846	July 9, 1878	427	121	14	67
Lantern, Signal	W. H. Harrison	209,678	Nov. 5, 1878	156	46	14	702
Lantern, Signal	N. Lash	198,988	Jan. 8, 1878	280	81	13	59
Lantern, Sportsman's	A. Ferguson	204,406	June 4, 1878	64	22	13	1022
Lap-ring	H. S. Wood	204,273	May 28, 1878	1134	325	13	967
Lapping and printing machine	C. D. Jillson and H. Smith	202,826	Apr. 23, 1878	1062		13	757
Lapping-machine	H. N. Range	199,379	Jan. 22, 1878	691	203	13	131
Lard and fruit press and sausage-stuffer	S. J. Keim	203,345	May 7, 1878	113	33	13	835
Lard, Apparatus for refining	R. Bullymore	200,252	Feb. 12, 1878	367	169	13	298
Last	F. A. Beach	210,744	Dec. 10, 1878	392	107	14	895
Last	J. E. Chenette	203,322	May 7, 1878	94	27	13	832
Last	J. E. Chenette	208,513	Oct. 1, 1878	57	18	14	497
Last	A. W. Cox	210,300	Nov. 26, 1878	850	250	14	805
Last	T. Dann	199,963	Feb. 5, 1878	74	24	13	244
Last	L. Darozir	199,272	Jan. 15, 1878	575	168	13	105
Last-block fastener	F. M. Ellms and J. Mills	201,100	Mar. 12, 1878	283	88	13	465
Last-block fastener	C. C. Johnson	204,830	June 11, 1878	427	126	13	1072
Last-block fastener	G. D. Paul	203,764	May 14, 1878	566	159	13	903
Last-block trimming-machine	J. C. Kingston	203,840	May 21, 1878	656	187	13	922
Last-channeling machine	L. Darozir	209,113	Oct. 22, 1878	743	216	14	604
Last-pulling machine	C. C. Johnson	205,100	June 18, 1878	721	214	13	1115
Lasting-machine	G. W. Copeland and J. E. Crisp	209,232	Oct. 22, 1878	865	251	14	621
Lasting-machine	H. G. Thompson	203,673	May 14, 1878	471	134	13	891
Latch	W. Bohannan	208,708	Oct. 8, 1878	269	77	14	532
Latch	E. W. Brettell	210,291	Nov. 26, 1878	841	247	14	804
Latch	F. W. Brocksieper	205,041	June 18, 1878	662	195	13	1107
Latch	A. E. Dietz	203,007	Apr. 30, 1878	1254	363	13	786
Latch	B. W. Foster	209,034	Oct. 15, 1878	638	185	14	585
Latch	D. C. Geer	207,654	Sept. 3, 1878	73	22	14	358
Latch	F. Keil	209,815	Nov. 12, 1878	309	92	14	726
Latch	M. C. and S. S. Niles	202,573	Apr. 16, 1878	774	223	13	713
Latch	R. B. Ruggles	202,474	Apr. 16, 1878	657	192	13	700
Latch	C. H. Smith	203,787	May 14, 1878	592	165	13	907
Latch	B. R. White	207,634	Sept. 3, 1878	49	15	14	355
Latch and lock combined	S. Oppenheimer	198,751	Jan. 1, 1878	23	5, 6	13	12
Latch and lock, Knob	W. I. Ludlow	200,318	Feb. 12, 1878	437	130	13	368
Latch, Door	S. Black	202,404	Apr. 16, 1878	589	173	13	690
Latch, Door	T. Percival	198,811	Jan. 1, 1878	92	25	13	22
Latch-fastening	B. Hollingsworth	201,675	Mar. 26, 1878	901	275	13	563
Latch for sliding doors	W. S. Carlisle	201,747	Mar. 26, 1878	972	297	13	574
Latch, Gate	M. Davenport	199,964	Feb. 5, 1878	75	24	13	245
Latch, Gate	W. F. Golden	201,406	Mar. 19, 1878	622	189	13	519
Latch, Gate	F. J. Lee and J. S. Ransdell	209,485	Oct. 29, 1878	1130	330	14	662
Latch, Gate	T. P. W. Magruder	200,660	Feb. 26, 1878	811	239	13	381
Latch, Gate	J. S. and J. Matthews	205,404	June 25, 1878	1054	312	13	1163
Latch, Gate	O. and J. Metz	209,702	Nov. 5, 1878	180	53	14	705
Latch, Gate	E. S. Shellhouse	207,823	Sept. 10, 1878	254	79	14	584
Latch, Gate	H. Unger	204,267	May 28, 1878	1130	323	13	986
Latch, Gate	C. Waller, jr.	205,590	July 2, 1878	181	59	14	26
Latch, Locking	W. Settelberg	203,783	May 14, 1878	588	164	13	966
Latch, Reversible	C. H. Labelle	199,452	Jan. 22, 1878	759	223	13	142
Latch, Reversible	M. C. and S. S. Niles	205,204	June 25, 1878	843	250	13	1136
Latch, Reversible	W. E. Sparks	201,958	Apr. 2, 1878	93	27	13	613
Latch, Reversible	W. E. Sparks	209,990	Nov. 19, 1878	503	153	14	755
Latch, Reversible	I. E. Van Benthuysen	201,573	Mar. 19, 1878	788	240	13	543
Latch, Reversible knob	J. L. Moesta	199,853	Jan. 29, 1878	1186	348	13	217
Lath machine, Metal	W. M. Parker	202,956	Apr. 30, 1878	1206	348	13	779
Lath-sawing machine	D. A. H. Starkweather	209,430	Oct. 29, 1878	1075	312	14	654
Lathe, Carriage	J. W. See	208,498	Oct. 1, 1878	41	23	14	494
Lathe cutting and boring attachment	M. Rice	201,948	Apr. 2, 1878	84	24	13	611
Lathe for turning masts and spars	H. Keen	203,920	May 21, 1878	740	213	13	933
Lathe for turning ovals	M. Chittenden and W. A. Lyon	205,474	July 2, 1878	11	4	14	10
Lathe for turning regular forms	E. A. Marsh	209,064	Oct. 15, 1878	678	195	14	590
Lathe for turning round or polygonal bodies	R. Beal	199,178	Jan. 15, 1878	483	142	13	91
Lathe, Gage	J. May	201,932	Apr. 2, 1878	71	19, 20	13	609

## Alphabetical list of inventions—Continued.

Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Lathe, Gage.....	E. Silver	190,584	Jan. 22, 1878	898	263	13	164
Lathe-head.....	W. Krutzsch	201,021	Mar. 5, 1878	199	64	13	446
Lathe, Oval-turning.....	H. C. Heckendoen	201,781	Mar. 26, 1878	1009	308	13	579
Lathe, Screw-cutting.....	A. F. Cherry	207,852	Sept. 10, 1878	287	88	14	389
Lathe, Watchmakers'.....	J. H. Sandmeyer	209,361	Oct. 29, 1878	1064	292	14	643
Lathes, &c., Friction-clutch for.....	J. W. Anthoine	201,587	Mar. 26, 1878	818	249	13	551
Lathes for cutting rubber and other rings, Attachment to.....	J. B. Candy	208,567	Oct. 1, 1878	117	34	14	504
Lathes, Gear-cutting attachment for.....	J. W. Post	208,401	Oct. 1, 1878	36	11	14	494
Lathes, Scroll-saw attachment to.....	T. R. Almond	207,150	Aug. 20, 1878	524	157	14	579
Lathes, Work-support for metal-turning.....	H. Reiss	206,485	July 30, 1878	1178	318	14	174
Laundry apparatus.....	S. J. Gordon	203,610	May 14, 1878	406	115	13	884
Lavatory.....	A. J. Bell	202,139	Apr. 9, 1878	298	88	13	646
Lavatory apparatus.....	D. Wellington	199,765	Jan. 29, 1878	1102	323	13	294
Lawn-rake.....	T. D. Davis	210,024	Dec. 17, 1878	610	169	14	519
Lawn-rake.....	J. Weichhart	210,650	Dec. 10, 1878	296	81	14	871
Lawn-sprinkler.....	H. G. Fiske	199,816	Jan. 29, 1878	1152	338	13	212
Lawn-sprinkler.....	T. Maguire	207,756	Sept. 3, 1878	176	54	14	571
Lawn-sprinkler.....	R. M. Merrill	205,886	July 9, 1878	470	134	14	72
Lead, Apparatus for the manufacture of white.....	G. L. Irwin	200,726	Feb. 26, 1878	880	258	13	391
Lead articles with tin, Coating.....	J. J. and L. Crooke	204,297	May 28, 1878	1102	312	13	930
Lead-cutter.....	G. W. Philippo and J. W. Owen	203,850	May 21, 1878	669	189	13	924
Lead, Manufacture of white.....	J. C. Martin	207,364	Aug. 27, 1878	758	211	14	314
Lead-pigment, Process of making.....	G. T. Lewis and E. O. Bartlett	206,680	Aug. 6, 1878	25	7	14	216
Lead pipes, Joining the ends of.....	A. L. Bricknell	199,180	Jan. 15, 1878	485	143	13	92
Lead, Process for refining impure.....	N. S. Keith	209,056	Oct. 15, 1878	667	177	14	589
Leader-pipe.....	P. Saucressig	203,781	May 14, 1878	585	104	13	106
Leaf-turner.....	C. F. Spiess	202,290	Apr. 9, 1878	456	133	13	67
Leaf-turner.....	J. J. Vincent and G. B. McMillan	203,962	May 21, 1878	788	226	14	559
Leather composition, Artificial.....	R. E. Ball	210,079	Nov. 19, 1878	603	171	14	709
Leather, Compound for currying.....	E. S. Thayer	204,898	May 28, 1878	1266	318	13	1063
Leather-dressing compound.....	N. and J. H. Quinlan, jr.	203,498	May 7, 1878	274	77	13	858
Leather-dressing machine.....	A. J. Alexander	207,930	Sept. 10, 1878	375	114	14	329
Leather-finishing machine.....	H. Staib	210,474	Dec. 3, 1878	87	22	14	835
Leather folding and shaping machine.....	J. Walden and G. Platts	209,731	Nov. 5, 1878	210	63	14	709
Leather-folding machine.....	R. H. Luffkin	202,844	Apr. 23, 1878	1081	309	13	760
Leather-folding machine.....	J. Walden and G. Platts	209,733	Nov. 5, 1878	215	65	14	710
Leather from sheeps' stomachs, Producing.....	E. Tivet	208,548	Oct. 1, 1878	90	21	14	501
Leather, Machine for splitting and beveling.....	G. L. Tyler	210,823	Dec. 10, 1878	473	133	14	894
Leather, &c., Making artificial.....	R. E. Ball	210,655	Dec. 10, 1878	300	77	14	871
Leather or paper board, Coloring and sizing.....	E. Andrews	203,810	May 21, 1878	629	177	13	919
Leather shaving and whitening machine.....	J. G. Buzzell	202,226	Apr. 9, 1878	391	114	13	653
Leather-skiving machine.....	C. Amazeen	200,682	Feb. 26, 1878	834	245	13	384
Leather-skiving machine.....	F. M. Carter	210,183	Nov. 26, 1878	728	216	14	789
Leather-skiving machine.....	M. M. Clough	208,950	Oct. 15, 1878	558	163	14	574
Leather-skiving machine.....	C. W. Schwanengel	208,041	Sept. 17, 1878	505	150	14	421
Leather-splitting machine.....	A. E. Whitney	209,001	Oct. 15, 1878	599	174	14	386
Leather stoning, glassing, and pebbling machine.....	E. B. Parkhurst	205,974	July 16, 1878	580	166	14	91
Leather-stretching machine.....	H. N. Dodge	207,508	Aug. 27, 1878	907	268	14	332
Leather-stuffing composition.....	M. L. Dewees and W. W. Green	209,800	Nov. 12, 1878	295	74	14	724
Leather-stuffing machine.....	J. W. Hildreth	201,526	Mar. 19, 1878	736	224	13	536
Leather, Tramping-drum for use in the manufacture of.....	F. Knapp	205,399	June 25, 1878	1050	311	13	1102
Leather-washer.....	T. Gingras	210,848	Dec. 17, 1878	510	144	14	908
Leather-waterproofing compound.....	W. F. Jenney	204,829	June 11, 1878	425	113	13	1072
Leather-work, Cutting-block for.....	E. Nicholson	201,622	Mar. 26, 1878	854	259	13	556
Leather-work, Cutting-board for.....	E. Nicholson	209,706	Nov. 5, 1878	183	54	14	705
Leaves, Skeletonizing.....	I. L. Rogers	211,054	Dec. 17, 1878	769	211	14	538
Lemon-squeezer.....	B. B. Whaley	203,229	Apr. 30, 1878	1479	433	13	815
Lemon squeezer and shaker combined.....	H. L. Heaton	204,325	May 28, 1878	1191	339	13	994
Letter-box.....	R. Hale	210,253	Nov. 26, 1878	800	237	14	759
Letter-package tie.....	J. Mersellis	204,496	June 4, 1878	72	25	13	1023
Letter-sheet.....	L. H. Rogers	202,589	Apr. 16, 1878	790	228	13	715
Letter sheet and envelope.....	C. L. Riker	203,855	May 21, 1878	673	190	13	924
Letter sheet and envelope.....	W. R. Ross	202,377	Apr. 16, 1878	565	165	13	687
Letter sheet and envelope combined.....	L. H. Rogers	202,874	Apr. 23, 1878	1112	319	13	765
Letters, Thumb-stall for facilitating the sorting of.....	J. S. Boyer	207,708	Sept. 3, 1878	126	39	14	365
Level.....	S. Gissinger	199,902	Feb. 5, 1878	12	4	13	234
Level and plumb, Spirit.....	J. Moss	201,276	Mar. 12, 1878	463	142	12	491
Level, Spirit.....	F. T. Ward and T. Bedworth	198,909	Jan. 1, 1878	194	55	12	38
Lever-press.....	V. Becker	206,527	July 30, 1878	1222	352	14	179
Lewis.....	W. Graham and J. A. Dennison	201,409	Mar. 19, 1878	623	190	13	533
Library-table.....	H. Closterman	200,173	Feb. 12, 1878	283	87	13	388
Library-table.....	W. R. Davis, jr.	208,378	Sept. 24, 1878	870	253	14	471
Life-boat.....	C. Dickenson	208,575	Oct. 1, 1878	123	36	14	566
Life-boat.....	F. Dunn	207,166	Aug. 20, 1878	538	162	14	381
Life-boat.....	D. G. Haskins	206,447	July 30, 1878	1138	326	14	169
Life-boat.....	J. F. Schultheis	200,347	Feb. 12, 1878	407	138	13	313
Life-boat.....	G. F. Sievern	200,485	Feb. 19, 1878	613	181	13	343
Life-boats, &c., Launching.....	J. A. Stockwell	209,938	Nov. 12, 1878	435	132	14	743
Life-preserver.....	M. Marx	206,397	July 30, 1878	1086	311	14	163
Life-preserver.....	D. Ruge	200,572	Feb. 19, 1878	699	205	13	356
Life-preserving satchel.....	B. D. D' Alessandro	205,617	July 2, 1878	157	47	14	29
Life-raft.....	C. Behre	210,083	Nov. 19, 1878	606	180	14	709
Life-saving lines, &c., Apparatus for projecting.....	L. A. Peck	206,126	July 16, 1878	738	212	14	110
Lifter.....							
See Retort-lifter.....	Water-lifter.						
Transom-lifter.....							
Lifting and carrying invalids, Apparatus for.....	S. T. Sands	209,519	Oct. 29, 1878	1171	340	14	667
Lifting-handle.....	N. Hayden	199,826	Jan. 29, 1878	1162	341	13	213
Lifting-jack.....	C. F. Asire	209,211	Oct. 22, 1878	847	244	14	618

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Lifting-jack .....	S., D., J., and L. S. Barrow .....	199, 177	Jan. 15, 1878	482	142	13	91
Lifting-jack .....	J. Buel .....	207, 850	Sept. 10, 1878	284	87	14	388
Lifting-jack .....	W. M. Crawford .....	203, 711	May 14, 1878	513	145	13	897
Lifting-jack .....	J. B. Fayette .....	201, 173	Mar. 12, 1878	355	109	13	475
Lifting-jack .....	V. H. Felt .....	204, 960	June 18, 1878	585	171	13	1096
Lifting-jack .....	R. F. Hageman .....	205, 635	July 2, 1878	176	53	14	32
Lifting-jack .....	J. W. Harbaugh .....	205, 636	July 2, 1878	177	53	14	32
Lifting-jack .....	N. Hill .....	200, 792	Feb. 26, 1878	939	277	13	401
Lifting-jack .....	E. O. Howland .....	205, 865	July 9, 1878	446	127	14	69
Lifting-jack .....	J. O. Joyce .....	209, 344	Oct. 20, 1878	988	287	14	640
Lifting-jack .....	J. O. Joyce .....	210, 946	Dec. 17, 1878	634	175	14	923
Lifting-jack .....	W. Kniffin .....	207, 876	Sept. 10, 1878	315	95	14	392
Lifting-jack .....	A. J. Landis .....	200, 140	Feb. 12, 1878	250	77	13	281
Lifting-jack .....	S. Lesher .....	202, 354	Apr. 16, 1878	543	159	13	684
Lifting-jack .....	J. M. McClintock .....	202, 849	Apr. 23, 1878	1085	310	13	760
Lifting-jack .....	N. McIntyre .....	202, 739	Apr. 23, 1878	966	277	13	745
Lifting-jack .....	T. W. Platt and A. M. Orwig .....	210, 708	Dec. 10, 1878	352	96	14	878
Lifting-jack .....	O. V. Price .....	202, 666	Apr. 23, 1878	893	256	13	736
Lifting-jack .....	B. M. Sherman .....	202, 197	Apr. 9, 1878	363	106	13	654
Lifting-jack .....	J. B. Smith .....	207, 909	Sept. 10, 1878	350	106	14	396
Lifting-jack .....	J. W. Stevens .....	200, 354	Feb. 12, 1878	476	140	13	314
Lifting-jack .....	J. M. Tichenor and H. L. Dexter .....	201, 467	Mar. 19, 1878	677	206	13	527
Lifting-jack .....	H. M. Willis .....	209, 635	Nov. 5, 1878	110	32	14	696
Lifting-jack .....	T. J. Woods .....	204, 408	May 28, 1878	1276	364	13	1004
Lifting-jack .....	F. S. Yinger .....	200, 117	Feb. 5, 1878	229	70	13	268
Lifting-jack and tire-tightener .....	A. W. Comstock .....	201, 502	Mar. 19, 1878	711	216	13	533
Light:							
See Drop-light. Head-light.							
Electric light. Sky-light.							
Lighting apparatus .....	J. A. Fonchet .....	210, 455	Dec. 3, 1878	69	17	14	833
Lighting apparatus .....	C. S. Wells .....	204, 639	June 4, 1878	214	69	13	1043
Lighting device .....	W. W. Bateholder .....	201, 485	Mar. 19, 1878	692	212	13	530
Lighting device, Automatic .....	D. H. Isenminger and M. Falcon .....	208, 099	Sept. 17, 1878	556	167	14	429
Lightning-conductor .....	H. W. Spang .....	204, 257	May 28, 1878	1122	321	13	985
Lightning-rod .....	D. Munson .....	204, 359	May 28, 1878	1227	350	13	999
Lightning-rod connection .....	C. H. Smith and J. Hewitt .....	201, 059	Mar. 5, 1878	289	75	13	451
Lightning-rods, Machine for making .....	T. H. Patee .....	202, 578	Apr. 16, 1878	780	225	13	714
Lime and other kilns .....	J. Baldermann .....	210, 834	Dec. 17, 1878	490	138	14	905
Lime-bin .....	C. A. Lawton .....	200, 618	Feb. 26, 1878	764	224	13	374
Lime-kiln, Portable .....	H. H. Bourne .....	198, 964	Jan. 8, 1878	254	73	13	55
Lime, plaster, &c., Kiln for baking .....	P. F. Mabile .....	207, 755	Sept. 3, 1878	175	53	14	371
Lime to produce caustic lime, Treating gas .....	A. W. Wilkinson .....	208, 656	Oct. 1, 1878	207	.....	14	517
Lime-throwing apparatus .....	E. S. Hunt .....	203, 274	May 7, 1878	39	12	13	825
Link and cross-head .....	W. Jackson .....	200, 915	Mar. 5, 1878	96	33	13	430
Link-bending machine .....	H. E. Grant .....	204, 316	May 28, 1878	1182	336	13	993
Link-bending machine .....	W. Jones .....	205, 190	June 25, 1878	827	{ 245 } 246	{ 13 } 13	1134
Link-heating furnace .....	J. H. Helm .....	200, 394	Feb. 19, 1878	526	155	13	330
Link, Lap .....	M. Howard .....	205, 091	June 18, 1878	714	212	13	1114
Link, Lap .....	A. Perry .....	204, 367	May 28, 1878	1236	352	13	1000
Links, Manufacturing coupling .....	J. Mann .....	201, 261	Mar. 12, 1878	449	138	13	488
Lint-room .....	R. F. Baughn and W. M. Harrison .....	203, 103	Apr. 30, 1878	1344	391	13	798
Lint-room, Fire-proof cotton .....	Z. N. Morrell .....	202, 283	Apr. 9, 1878	449	132	13	666
Liquid-can .....	G. W. Peck .....	208, 118	Sept. 17, 1878	578	172	14	431
Liquid-can .....	F. Wilcox .....	207, 926	Sept. 10, 1878	369	112	14	399
Liquid-can or vessel .....	J. P. Adams .....	203, 868	May 21, 1878	685	105	13	926
Liquid-cooler .....	C. A. Maus .....	200, 925	Mar. 5, 1878	104	35	13	431
Liquid-cooler .....	F. W. Wiesebrock .....	202, 389	Apr. 16, 1878	574	168	13	688
Liquid-cooling flask .....	A. M. Kloczewski and V. Klobassa .....	200, 065	Feb. 5, 1878	174	56	13	260
Liquid-forcing apparatus .....	J. Neil .....	204, 680	June 11, 1878	264	82	13	1053
Liquid-freezer .....	W. H. Mansfield .....	209, 700	Nov. 5, 1878	178	52	14	704
Liquids, Apparatus for storing and discharging .....	S. H. Rhoades .....	203, 194	Apr. 30, 1878	1443	421	13	811
Liquids, Device for drawing and measuring .....	A. F. Lapham .....	209, 904	Nov. 12, 1878	398	119	14	738
Liquids, Vessel for holding .....	W. F. Sherman .....	199, 231	Jan. 15, 1878	532	156	13	99
Liquors, acids, and oils, Receptacle for .....	J. F. Reinhard .....	204, 609	June 4, 1878	183	59	13	1038
Liquors, Flavoring .....	J. H. Thierman .....	205, 443	June 25, 1878	1092	323	13	1168
Lead-binder .....	H. A. Harris .....	210, 527	Dec. 3, 1878	148	39	14	842
Lock:							
See Alarm-lock. Indicator-lock.							
Bag-lock. Master-key lock.							
Bung-lock. Nut-lock.							
Car-lock. Permutation-lock.							
Car-seat lock. Prison-lock.							
Chain-lock. Recording-lock.							
Combination-lock. Sash-lock.							
Cylinder-lock. Satchel-lock.							
Door-lock. Seal-lock.							
Drawer-lock. Spring-lock.							
Electric-lock. Stove-pipe-joint lock.							
Extension-lock. Time-lock.							
Faucet-lock. Trunk-lock.							
Fire-arm lock. Vehicle-seat lock.							
Hasp-lock. Wagon-lock.							
Lock .....	G. E. Bendix .....	202, 511	Apr. 16, 1878	689	202	13	705
Lock .....	C. C. Dickerman .....	204, 139	May 28, 1878	995	283	13	969
Lock .....	J. W. Fackler .....	206, 712	Aug. 6, 1878	56	17	14	214
Lock .....	J. Klinking .....	204, 075	May 21, 1878	885	254	13	951
Lock .....	J. Jett .....	209, 812	Nov. 12, 1878	306	91	14	726
Lock .....	J. Sargent .....	210, 807	Dec. 10, 1878	456	128	14	892
Lock .....	A. Schneider .....	206, 044	July 16, 1878	645	{ 187 } 188	{ 14 } 14	100
Lock .....	G. S. Snell .....	206, 633	July 30, 1878	1330	382	14	192
Lock .....	W. H. Taylor .....	208, 863	Oct. 8, 1878	442	128	14	555



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Lock .....	W. Walker .....	209,734	Nov. 5, 1878	217	65	14	710
Lock .....	O. D. White .....	209,505	Nov. 5, 1878	61	18	14	689
Lock and key .....	D. Border .....	199,023	Jan. 8, 1878	312	92	13	64
Lock bolt and handle combined .....	W. S. Montgomery .....	202,186	Apr. 9, 1878	354	103	13	633
Lock-key .....	G. Finley .....	199,969	Feb. 5, 1878	79	26	13	245
Lock-key, Flexible .....	L. J. Roberts .....	208,123	Sept. 17, 1878	587	174	14	432
Locks and latches, Spindle-fastener for .....	A. Johnson .....	203,160	Apr. 30, 1878	1410	411	13	806
Locket .....	S. P. Cox .....	203,425	May 7, 1878	199	57	13	847
Locket .....	T. Granbery .....	206,012	July 16, 1878	616	177	14	96
Locket-settings, Die for forming .....	H. Henrich .....	203,040	Apr. 30, 1878	1287	372	13	790
Locomotive .....	J. J. Anthony .....	206,697	Aug. 6, 1878	42	12, 13	14	211
Locomotive .....	J. J. Anthony .....	209,209	Oct. 22, 1878	845	244	14	618
Locomotive .....	G. Vincent .....	201,308	Mar. 12, 1878	500	154	13	495
Locomotive-alarm to drive cattle from the track .....	W. A. Simpson and S. Kimball .....	199,867	Jan. 29, 1878	1197	351	13	218
Locomotive and fire-box boiler .....	J. L. Winslow .....	201,214	Mar. 12, 1878	395	122	13	482
Locomotive ash-pan .....	J. B. Harrison .....	200,910	Mar. 5, 1878	91	31	13	428
Locomotive-boiler .....	D. Sullivan .....	208,546	Oct. 1, 1878	89	26, 27	14	501
Locomotive-boilers, Crown-sheet for .....	J. Meredith .....	205,406	June 25, 1878	1055	313	13	1163
Locomotive, Road .....	J. B. Root .....	205,212	June 25, 1878	850	253	13	1137
Locomotive-tenders, Buffer for .....	G. W. Prescott .....	210,467	Dec. 3, 1878	81	20	14	834
Locomotive-tenders, Feeding .....	J. Haggas .....	206,560	July 30, 1878	1238	362	14	184
Locomotives, Adjustable exhaust for .....	D. Harrigan .....	210,041	Dec. 17, 1878	627	174	14	922
Locomotives, Bell-ringer for .....	W. C. Ovenden .....	200,330	Feb. 12, 1878	452	133	13	310
Locomotives, &c., Electro-magnetic traction device for .....	R. Werdermann .....	199,885	Jan. 29, 1878	1214	356	13	221
Locomotives, Exhaust-nozzle for .....	R. N. Allen .....	190,137	Jan. 15, 1878	443	131	13	85
Locomotives, Promoting traction in .....	J. A. Shinn .....	203,784	May 14, 1878	589	165	13	906
Locomotives, Variable exhaust for .....	G. S. Brainerd .....	198,789	Jan. 1, 1878	73	19	13	19
Locomotives, Variable exhaust for .....	G. S. Brainerd .....	202,144	Apr. 9, 1878	303	90	13	646
Locomotives, Variable exhaust for .....	G. S. Brainerd .....	202,145	Apr. 9, 1878	304	90	13	646
Log-slide .....	J. Paul .....	204,093	June 18, 1878	617	181	13	1106
Log-turner .....	J. H. Driscoll and L. Balcom .....	202,712	Apr. 23, 1878	938	268	13	741
Log-turner .....	S. W. and M. L. Gatts .....	209,881	Nov. 12, 1878	377	113	14	735
Log-turner .....	G. J. Kautz .....	204,980	June 18, 1878	604	177	13	1059
Log-turner .....	C. and F. Strobel .....	204,301	May 23, 1878	1257	358	13	1062
Log-turner .....	J. A. Tripp and H. M. Ballou .....	209,201	Oct. 22, 1878	838	242	14	616
Logs, Coupling for the joints of .....	O. Wells .....	205,709	July 2, 1878	262	78	14	41
Logotypes, Manufacture of .....	G. W. Glazier .....	202,716	Apr. 23, 1878	942	269	13	742
Loom .....	S. Colvin and H. A. Remington .....	210,670	Dec. 10, 1878	315	86	14	873
Loom .....	H. D. Davis .....	203,875	May 21, 1878	712	204	13	850
Loom .....	W. P. Derby .....	208,675	Oct. 8, 1878	234	67	14	528
Loom .....	M. A. Furbush and C. H. Knowlton .....	203,722	May 14, 1878	522	148	13	886
Loom .....	E. Howard .....	200,536	Feb. 19, 1878	662	195	13	351
Loom, Circular .....	H. Morris .....	203,183	Apr. 30, 1878	1431	418	13	809
Loom for weaving leno, &c .....	T. Aldred .....	210,736	Dec. 10, 1878	382	104	14	881
Loom for weaving wire fabrics .....	J. Asbach .....	206,068	July 16, 1878	671	194	14	108
Loom-harness .....	J. H. Crowell .....	209,799	Nov. 12, 1878	294	88	14	724
Loom-harness .....	T. A. Emmons .....	202,339	Apr. 16, 1878	529	154	13	682
Loom let-off mechanism .....	J. Belicard .....	209,217	Oct. 22, 1878	851	246	14	619
Loom-picker .....	J. G. Garland .....	205,261	June 25, 1878	901	267	13	1143
Loom-picker .....	A. A. Gordon .....	203,139	Apr. 30, 1878	1383	402	13	803
Loom-picker .....	C. T. Grilley .....	204,213	May 28, 1878	1080	308	13	969
Loom-picker .....	A. Holbrook .....	207,739	Sept. 3, 1878	158	48	14	369
Loom-picker check .....	F. McCormick .....	210,136	Nov. 19, 1878	664	197	14	777
Looms, Picker-staff strap for .....	E. S. Stone .....	202,675	Apr. 23, 1878	901	258	13	737
Loom-picking mechanism .....	E. P. Terrell and L. A. Williams .....	204,390	May 28, 1878	1262	360	13	1043
Loom-picking motion .....	L. B. Howland .....	207,600	Sept. 3, 1878	78	24	14	359
Loom shedding mechanism, Fancy .....	S. Walker .....	204,466	June 4, 1878	48	16	13	1019
Loom-shuttle .....	H. P. Briggs .....	210,292	Nov. 26, 1878	842	246	14	804
Loom-shuttle .....	G. C. Mills .....	200,745	Feb. 20, 1878	897	264	13	393
Loom-shuttle .....	J. M. Palmer and C. A. Shaw .....	210,874	Dec. 17, 1878	542	153	14	911
Loom-shuttle .....	C. J. Schurheek and C. A. Stevenson .....	203,653	May 14, 1878	448	128	13	889
Loom-shuttle attachment .....	W. A. Doherty .....	204,717	June 11, 1878	305	94	13	1059
Loom-shuttle-box mechanism .....	H. B. Ronwick .....	209,714	Nov. 5, 1878	101	57	14	706
Loom-shuttle-box motion .....	R. B. Goodyear .....	205,794	July 9, 1878	374	108	14	60
Loom-shuttle-box motion .....	L. J. Masterson .....	209,907	Nov. 12, 1878	400	120	14	738
Loom-shuttle motion .....	J. Widner .....	203,572	May 14, 1878	374	106	13	860
Loom-shuttle motion .....	W. B. Willard .....	208,873	Oct. 8, 1878	453	131	14	556
Loom-shuttle motion .....	H. Woodman .....	209,439	Oct. 29, 1878	1085	316	14	665
Loom-stopping mechanism .....	J. Watters .....	205,451	June 25, 1878	1100	825	13	1169
Loom take-up and let-off mechanism .....	G. S. Smith .....	209,300	Oct. 22, 1878	920	271	14	630
Loom-temple .....	N. L. Allen .....	200,614	Mar. 5, 1878	1	1	13	415
Loom-temple .....	R. P. Pearson .....	209,086	Feb. 5, 1878	198	62	13	264
Loom-temple .....	R. P. Pearson .....	209,419	Oct. 29, 1878	1063	809	14	652
Loom-temple .....	J. H. Prouty and S. S. Sprague .....	211,048	Dec. 17, 1878	763	209	14	937
Loom-temple .....	J. B. Stamou .....	209,011	Oct. 15, 1878	714	207	14	545
Loom-temple for weaving tubular fabrics .....	G. F. Simon .....	210,715	Dec. 10, 1878	359	99	14	879
Loom, Vertical .....	J. M. Klagg .....	198,763	Jan. 1, 1878	43	11, 12	13	14
Louver-ventilator .....	J. F. Starr, jr. .....	202,765	Apr. 23, 1878	993	285	13	749
Low-water alarm for steam-boilers .....	G. H. Crosby .....	208,992	Oct. 15, 1878	561	167	14	575
Low-water indicator .....	W. A. Cole .....	206,773	Aug. 6, 1878	110	37	14	221
Low-water indicator .....	J. L. Walker .....	207,322	Aug. 20, 1878	698	208	14	801
Low-water indicator and alarm .....	F. C. Gilliland .....	201,772	Mar. 26, 1878	1002	366	13	578
Low-water indicator and alarm .....	A. Hann .....	209,239	Oct. 22, 1878	888	259	14	624
Low-water indicator for steam-boilers .....	C. F. Kurz .....	208,829	Oct. 8, 1878	390	114	14	559
Lozenge-machines, Portable tray receiver and elevator for .....	T. Robertson .....	201,049	Mar. 5, 1878	230	72, 73	13	450
Lubricant .....	C. Johnston .....	203,819	May 21, 1878	655	.....	13	922
Lubricant .....	W. H. Smith and M. C. Osborn .....	208,697	Oct. 8, 1878	260	.....	14	541



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Lubricating car-wheels.....	P. Byard.....	208, 290	Sept. 24, 1878	781	228	14	460
Lubricating compound.....	R. J. Chard.....	199, 789	Jan. 29, 1878	1128	.....	13	208
Lubricating compound.....	C. Johnston.....	199, 913	Feb. 5, 1878	28	.....	13	237
Lubricating compound.....	J. M. Lippincott.....	210, 461	Dec. 3, 1878	75	.....	14	834
Lubricating compound.....	G. G. Munger.....	205, 124	June 18, 1878	743	.....	13	1118
Lubricating device.....	F. B. Walton.....	199, 602	Jan. 22, 1878	918	269	13	168
Lubricator: See Axle-lubricator.      Shafting-lubricator. Cylinder-lubricator.      Steam-engine lubri- Pulley-lubricator.      cator.							
Lubricator.....	H. Allton.....	204, 874	June 18, 1878	497	145	13	1085
Lubricator.....	J. Barry.....	201, 731	Mar. 26, 1878	957	293	13	572
Lubricator.....	H. Brocius, H. E. Bensinger, and S. Wragg.	205, 524	July 2, 1878	63	18	14	17
Lubricator.....	W. A. Clark.....	201, 332	Mar. 19, 1878	541	167	13	508
Lubricator.....	W. A. Clark.....	202, 235	Apr. 9, 1878	399	117	13	659
Lubricator.....	J. Farley.....	198, 842	Jan. 1, 1878	119	34	13	27
Lubricator.....	G. H. Flower.....	200, 446	Feb. 19, 1878	576	170	13	337
Lubricator.....	G. H. Hoagland.....	202, 820	Apr. 23, 1878	1055	303	13	757
Lubricator.....	P. Hoffman.....	207, 355	Aug. 27, 1878	750	224	14	313
Lubricator.....	J. L. Knight.....	204, 672	June 11, 1878	255	80	13	1052
Lubricator.....	C. D. Lynch.....	202, 736	Apr. 23, 1878	958	{ 275 276 }	13	744
Lubricator.....	J. T. Meyer.....	200, 623	Feb. 26, 1878	768	226	13	375
Lubricator.....	W. Moses.....	198, 952	Jan. 8, 1878	242	69	13	53
Lubricator.....	C. F. Raymond.....	207, 067	Aug. 13, 1878	424	131	14	262
Lubricator.....	J. W. Reed.....	199, 224	Jan. 15, 1878	526	155	13	98
Lubricator.....	J. Richards.....	201, 289	Mar. 12, 1878	479	147	13	493
Lubricator.....	N. Seibert.....	208, 932	Oct. 15, 1878	526	154	14	571
Lubricator.....	R. W. Tavenor.....	210, 371	Nov. 26, 1878	933	271	14	816
Lubricator.....	M. C. Curran.....	210, 909	Dec. 17, 1878	695	191	14	929
Lumber-drier.....	A. McNelle.....	201, 033	Mar. 5, 1878	214	67	13	447
Lumber-drier.....	N. P. Chipman.....	201, 330	Mar. 19, 1878	540	166	13	508
Lumber for running through V-shaped flames, Bunch- ing.	M. J. Egery.....	207, 596	Sept. 3, 1878	12	5	14	351
Lumber, Machine for edging.....	J. DuBois.....	200, 992	Mar. 5, 1878	167	54, 55	13	441
Lumber, Machine for ripping, surfacing, and match- ing.							
Lumber, Machine for trimming.....	G. W. Nichols.....	206, 962	Aug. 13, 1878	325	99	14	250
Lumber, Manufacture of compound.....	W. E. Brock.....	206, 534	July 30, 1878	1228	353	14	180
Lunch-case.....	J. Will.....	206, 287	July 23, 1878	940	266	14	140
M.							
Macaroni-machine.....	G. Grondona.....	210, 199	Nov. 26, 1878	744	220	14	791
Magnet, Electro.....	E. L. Paine.....	200, 929	Mar. 5, 1878	108	36	13	432
Magnet, Electro.....	H. M. Paine.....	203, 492	May 7, 1878	268	77	13	857
Magnet, Multipolar.....	A. K. Eaton.....	204, 141	May 28, 1878	999	284	13	969
Magnet, Polarized electro.....	G. M. Phelps.....	203, 369	May 7, 1878	140	40, 41	13	839
Magneto-electric and electro-magnetic machine.....	E. Burgin.....	206, 084	July 16, 1878	685	198	14	105
Magneto-signal apparatus.....	G. L. Anders.....	200, 963	Mar. 5, 1878	138	45	13	437
Mail-bag.....	C. E. Bailey.....	210, 899	Dec. 17, 1878	583	161	14	916
Mail-bag.....	A. Call.....	201, 156	Mar. 12, 1878	341	105	13	473
Mail-bag.....	A. P. Carnagy.....	210, 994	Dec. 17, 1878	688	190	14	929
Mail-bag.....	B. Landon.....	210, 338	Nov. 26, 1878	894	262	14	811
Mail-bag.....	P. S. and F. M. Thomson.....	210, 579	Dec. 3, 1878	210	55	14	830
Mail-bag.....	J. H. Weaver and D. W. Judson.....	210, 585	Dec. 3, 1878	215	57	14	851
Mail-bag.....	J. H. Weaver and D. W. Judson.....	210, 586	Dec. 3, 1878	216	57	14	851
Mail-bag catcher.....	J. A. Boals.....	199, 499	Jan. 22, 1878	806	{ 236 237 }	13	150
Mail-bag fastener.....	G. H. Fayman.....	206, 169	July 23, 1878	805	230	14	122
Mail-bag fastener and label-holder.....	H. B. Ferren.....	209, 878	Nov. 12, 1878	375	112	14	735
Mail-bag fastener and tag-holder.....	J. B. Gathright.....	210, 417	Dec. 3, 1878	30	6	14	827
Mail-bag fastener and tag-holder.....	J. Metz.....	210, 391	Nov. 26, 1878	937	277	14	819
Mail-bag fastening.....	W. J. Stowell.....	209, 723	Nov. 5, 1878	203	60	14	708
Mailing-package.....	F. J. Grotevent.....	202, 720	Apr. 23, 1878	945	270	13	742
Mailing-package.....	H. G. Pearson.....	207, 979	Sept. 10, 1878	425	128	14	406
Mailing-package.....	W. B. Pittman.....	204, 603	June 4, 1878	176	56	13	1037
Main and pipe.....	E. H. Austin.....	209, 104	Oct. 22, 1878	731	{ 211 212 }	14	603
Mallet-holder.....	G. B. Goddard.....	202, 165	Apr. 9, 1878	332	97	13	650
Malt extract.....	J. Carnrick.....	210, 496	Dec. 3, 1878	110	.....	14	838
Malt-plow.....	C. Fey.....	207, 495	Aug. 27, 1878	897	264	14	330
Malt preparatory to mashing, Apparatus for wetting.....	M. Schmahl.....	208, 038	Sept. 17, 1878	502	149	14	421
Man-hole and cover.....	T. Kerr.....	201, 349	Mar. 19, 1878	561	172	13	511
Mandrel, Expanding.....	F. H. Vannan.....	202, 768	Apr. 23, 1878	996	286	13	749
Mandrel, Forging.....	J. H. Alker.....	199, 892	Feb. 5, 1878	2	1	13	233
Mangle.....	H. Albers.....	205, 168	June 25, 1878	806	239	13	1131
Mangle.....	J. F. Baldwin.....	204, 701	June 11, 1878	284	88, 89	13	1056
Mangle, Clothes.....	H. Albers.....	199, 677	Jan. 29, 1878	1022	298	13	191
Manure and guano distributor.....	R. J. Jordan and J. H. Barron.....	200, 729	Feb. 26, 1878	882	259	13	391
Manure, Carriage for spreading.....	A. McKenney.....	208, 029	Sept. 17, 1878	492	146	14	420
Manure-fork.....	B. F. Barr.....	207, 338	Aug. 27, 1878	730	219	14	311
Manure from night-soil, Apparatus for the manufact- ure of.	C. M. Kimball.....	200, 731	Feb. 26, 1878	884	260	13	391
Manure-grinder.....	T. C. Garlington.....	198, 882	Jan. 1, 1878	165	47	13	34
Marble, Artificial.....	A. Braul.....	205, 346	June 25, 1878	997	.....	13	1156
Marble, Artificial.....	J. O. Williams.....	201, 580	Mar. 19, 1878	798	.....	13	544
Marble, Composition for artificial.....	J. F. Martin.....	204, 318	May 28, 1878	1215	.....	13	997
Marble, slate, &c., Machine for dressing and orna- menting.	W. K. Lorenz.....	209, 062	Oct. 15, 1878	677	194	14	590
Marine engine.....	A. Demo.....	203, 006	Apr. 30, 1878	1252	{ 362 363 }	13	786
Marker, Corn.....	D. S. Harner.....	207, 031	Aug. 13, 1878	391	120	14	258
Marker, Corn.....	J. W. Thompson.....	208, 438	Sept. 24, 1878	934	274	14	480

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Marker, Corn-row .....	S. P. Kimball .....	206,800	Aug. 6, 1878	148	46	14	225
Marker, Land .....	W. Everitt .....	209,011	Nov. 5, 1878	79	23	14	601
Marker, Land .....	R. Spelman .....	208,769	Oct. 8, 1878	336	96	14	541
Marker, Land .....	C. H. Warrington .....	210,278	Nov. 26, 1878	826	244	14	832
Marquetry .....	J. Dill .....	199,522	Jan. 22, 1878	836	244	13	135
Martingale-ring .....	D. C. Lockwood .....	203,631	May 14, 1878	425	122	13	886
Mash-rake .....	C. Kaestner .....	207,283	Aug. 20, 1878	663	106	14	296
Mash, Treating corn .....	M. Cziner .....	205,720	July 9, 1878	301	.....	14	50
Masher, Grain .....	L. A. De Lime .....	203,819	May 21, 1878	638	179	13	920
Mashing apparatus .....	M. Cziner .....	205,730	July 9, 1878	302	89	14	51
Mask .....	G. W. Howland .....	205,093	June 18, 1878	716	212	13	1114
Mask .....	F. W. Thayer .....	200,358	Feb. 12, 1878	479	141	13	315
Mason's pointing-tool .....	K. C. Mackay .....	210,947	Dec. 17, 1878	634	175	14	823
Master-key device for post-office boxes .....	H. R. Towne .....	206,040	July 30, 1878	1347	368	14	194
Master-key lock .....	H. Wadsworth .....	203,222	Apr. 30, 1878	1471	{ 430 431 }	{ 13 13 }	814
Mat:							
<i>See</i> Oil-press mat.							
Match-box .....	W. A. Morse .....	205,202	June 25, 1878	842	250	13	1136
Match-machine .....	C. J. Donnelly .....	203,125	Apr. 30, 1878	1306	398	13	801
Match-safe .....	J. Gilbert .....	205,054	July 16, 1878	557	159	14	88
Match-safe .....	G. R. Taylor .....	200,778	Feb. 26, 1878	927	273	13	336
Match-safe and lamp combined .....	C. Jacobi .....	199,444	Jan. 22, 1878	753	221	13	141
Match-splint .....	J. H. White .....	210,384	Nov. 26, 1878	949	275	14	818
Matches, Machine for cutting and stamping .....	G. P. Joffroy .....	208,100	Sept. 17, 1878	557	167	14	429
Matches, Machine for dipping .....	A. R. Sprout .....	208,996	Oct. 15, 1878	595	173	14	579
Mattress .....	H. Teats .....	203,089	Apr. 30, 1878	1333	387	13	797
Mattress, Invalid .....	C. B. Price .....	202,116	Apr. 9, 1878	275	81	13	642
Mattress, Spring .....	A. Carter .....	201,158	Mar. 12, 1878	343	105	13	473
Mattresses, Frame for supporting wire .....	W. J. Boda .....	203,700	May 14, 1878	500	142	13	895
Meal-bin .....	C. Raible .....	201,047	Mar. 5, 1878	228	72	13	450
Meal-bin .....	J. Thickett .....	198,781	Jan. 1, 1878	64	16	13	17
Meal cooling and drying apparatus .....	O. M. Morse .....	205,669	July 2, 1878	220	65	14	36
Meal, flour, grain, &c., Apparatus for drying .....	J. T. Maybury .....	207,051	Aug. 13, 1878	408	127	14	260
Meal heater and steamer .....	T. V. Curtis and A. M. Andrews .....	199,962	Feb. 5, 1878	73	24	13	244
Measure, Ale or beer .....	T. Miller .....	200,744	Feb. 26, 1878	896	263	13	363
Measure and register, Liquid .....	C. H. Goebel .....	209,338	Oct. 22, 1878	980	285	14	640
Measure for hats and caps .....	W. J. Van Horn .....	200,364	Feb. 12, 1878	458	143	13	216
Measure, Grain .....	J. D. Knight .....	199,159	Jan. 15, 1878	465	137	13	88
Measure, Liquid .....	C. D. Austin .....	206,211	July 23, 1878	832	242	14	128
Measure, Liquid .....	A. Bernstein .....	203,105	Apr. 30, 1878	1346	301	13	798
Measure, Liquid .....	M. M. Kendall .....	206,024	July 16, 1878	625	181	14	97
Measure, Liquid .....	S. Rigby, 3d, and C. F. Rigby .....	200,091	Feb. 5, 1878	202	63	43	264
Measure, Liquid .....	J. J. Roberts .....	210,631	Dec. 10, 1878	275	75	14	868
Measure, Lumber .....	E. M. Whyler .....	208,779	Oct. 8, 1878	346	99	14	542
Measure, Registering tape .....	S. Kethledge .....	208,101	Sept. 17, 1878	559	167	14	429
Measure, Tape .....	J. E. Conly .....	209,658	Nov. 5, 1878	135	39	14	699
Measures, Combined stroker and handle in .....	A. F. Ward .....	202,610	Apr. 16, 1878	812	235	13	717
Measures, Drip-pan for liquid .....	S. D. Stauffer .....	210,975	Dec. 17, 1878	865	183	14	926
Measures, Receptacle for grocer's .....	E. M. Shirley .....	207,138	Aug. 20, 1878	512	155	14	277
Measuring and marking fabrics, Machine for .....	M. R. Miller and A. B. Werman .....	203,665	July 2, 1878	210	64	14	36
Measuring and marking fabrics, Machine for .....	J. Brady .....	209,647	Nov. 5, 1878	123	36	14	697
Measuring and marking fabrics, Machine for .....	S. C. Talcott .....	207,912	Sept. 10, 1878	353	107	14	397
Measuring and rolling machine, Cloth .....	C. Q. Smith .....	202,288	Apr. 9, 1878	455	133	13	667
Measuring apparatus, Cloth .....	T. T. Farnsworth .....	209,164	Oct. 22, 1878	798	231	14	611
Measuring attachment for refrigerating milk-wagons .....	P. T. Weir .....	203,969	May 21, 1878	793	227	14	940
Measuring-can .....	S. E. Humphreys .....	207,523	Aug. 27, 1878	929	273	14	335
Measuring, controlling, and registering liquids, Apparatus for .....	F. J. J. Delori .....	200,184	Feb. 12, 1878	303	90	13	288
Measuring device, Distance .....	A. Felldin .....	210,031	Dec. 17, 1878	618	171	14	920
Measuring-gage .....	N. C. Larsen .....	201,798	Mar. 26, 1878	1025	313	13	582
Measuring-jacket .....	H. Lingen .....	207,880	Sept. 10, 1878	319	97	14	302
Measuring-tool, Tailor's .....	E. O. Thompson .....	200,779	Feb. 26, 1878	928	273	13	399
Meat and pickle weight .....	M. Moirart .....	206,745	Aug. 6, 1878	90	29	14	218
Meat and vegetable cutter .....	W. H. Goodchild .....	200,769	Feb. 26, 1878	862	{ 253 254 }	{ 13 13 }	388
Meat, Apparatus for curing .....	D. L. Holden .....	207,277	Aug. 20, 1878	657	195	14	295
Meat, &c., Apparatus for preserving .....	T. G. Ames .....	199,248	Jan. 15, 1878	546	161	13	101
Meat, Apparatus for preserving .....	W. I. Goodin .....	207,268	Aug. 20, 1878	648	193	14	294
Meat, Apparatus for smoking .....	R. R. Lewis and J. H. Crumb .....	208,185	Sept. 17, 1878	656	192	14	441
Meat-can .....	G. Brougham .....	205,946	July 16, 1878	547	155	14	87
Meat-can .....	F. Yunginger .....	205,714	July 2, 1878	207	79	14	42
Meat-chopper .....	E. W. Fawcett .....	204,209	May 28, 1878	1076	{ 306 307 }	{ 13 13 }	979
Meat-chopper .....	G. and C. A. Juengst .....	209,070	Nov. 19, 1878	482	146	14	753
Meat-chopper .....	M. J. Stein .....	202,600	Apr. 16, 1878	801	231	13	716
Meat-chopping machine .....	J. Meahl and A. Kroezalla .....	204,355	May 28, 1878	1222	348	13	998
Meat-chopping machine .....	J. Sander .....	199,317	Jan. 15, 1878	622	180	13	113
Meat-cutter .....	L. L. Gilliland .....	208,232	Sept. 24, 1878	718	211	14	453
Meat-cutter .....	L. L. Gilliland .....	208,233	Sept. 24, 1878	719	211	14	453
Meat-cutter .....	A. R. Gillis .....	204,811	June 11, 1878	407	119	13	1070
Meat-cutter .....	J. E. Smith .....	208,859	Oct. 8, 1878	439	127	14	556
Meat-cutting machine .....	C. Schiller .....	203,201	Apr. 30, 1878	1454	425	13	812
Meat-mixing machine .....	O. E. Walker .....	202,206	Apr. 9, 1878	370	108	13	655
Meat, Powder for curing .....	E. Gorges .....	201,344	Mar. 19, 1878	555	.....	13	510
Meat, Preserving .....	C. N. Armstrong .....	208,782	Oct. 8, 1878	347	.....	14	542
Meat, Preserving .....	J. Brace .....	200,248	Feb. 12, 1878	363	.....	13	297
Meat, Preserving .....	J. J. Wheat .....	203,682	May 14, 1878	478	136	13	882
Meat-roaster .....	C. Mackh .....	204,590	June 4, 1878	162	53	13	1035
Meat, Salting and curing .....	J. J. Wheat .....	203,681	May 14, 1878	478	136	13	882
Meat, Solution for preserving .....	F. McCulley .....	201,811	Mar. 26, 1878	1037	.....	13	584
Meat-tenderer .....	T. J. Coulter .....	210,503	Dec. 3, 1878	116	30	14	829
Meat-tenderer .....	J. P. Davies .....	207,107	Aug. 20, 1878	464	145	14	274
Meat-tenderer .....	C. T. Stephens .....	198,755	Jan. 1, 1878	27	7	13	13
Meat-tenderer .....	L. L. Treman .....	203,218	Apr. 30, 1878	1468	429	13	814
Meat-tenderer .....	C. K. Whittier .....	210,652	Dec. 10, 1878	298	81	14	871

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Meats, Prepared .....	E. Gunkel .....	203, 614	May 14, 1878	408	.....	13	884
Mechanical movement .....	F. Blackburn and V. Moeslein ..	205, 829	July 9, 1878	412	117	14	65
Mechanical movement .....	P. Broadbooks .....	203, 111	Apr. 30, 1878	1352	393	13	799
Mechanical movement .....	P. Broadbooks .....	203, 112	Apr. 30, 1878	1353	394	13	799
Mechanical movement .....	D. E. Cripe .....	210, 014	Nov. 19, 1878	534	160	14	759
Mechanical movement .....	J. E. Crisp .....	210, 452	Dec. 3, 1878	65	16, 17	14	833
Mechanical movement .....	J. C. Davis .....	202, 707	Apr. 23, 1878	934	267	13	741
Mechanical movement .....	E. A. Howe .....	203, 734	May 14, 1878	535	152	13	900
Mechanical movement .....	J. H. Kersey .....	207, 425	Aug. 27, 1878	822	243	13	922
Mechanical movement .....	W. Koss .....	205, 964	July 16, 1878	567	162	14	89
Mechanical movement .....	J. R. Little .....	206, 184	July 23, 1878	818	234	14	124
Mechanical movement .....	J. W. Mullins .....	201, 039	Mar. 5, 1878	220	69	13	449
Mechanical movement .....	J. W. Mullins .....	203, 758	May 14, 1878	560	158	13	903
Mechanical movement .....	B. F. Penn .....	205, 976	July 16, 1878	582	166	14	91
Mechanical movement .....	J. B. Root .....	205, 213	June 25, 1878	852	253	13	1137
Mechanical movement .....	A. W. Utterback .....	204, 462	June 4, 1878	45	15	13	1019
Mechanical movement .....	A. Warth .....	209, 736	Nov. 5, 1878	219	66	14	710
Medical compound .....	H. Bowie .....	202, 141	Apr. 9, 1878	300	.....	13	646
Medical compound .....	T. P. Childs .....	202, 231	Apr. 9, 1878	396	.....	13	659
Medical compound .....	L. Daniel .....	209, 331	Oct. 22, 1878	973	.....	14	639
Medical compound .....	G. P. Delisser .....	202, 246	Apr. 9, 1878	414	.....	13	661
Medical compound .....	H. Falk .....	202, 801	Apr. 23, 1878	1027	.....	13	753
Medical compound .....	W. M. Green .....	207, 864	Sept. 10, 1878	300	.....	14	390
Medical compound .....	H. and M. Hawkins .....	201, 010	Mar. 5, 1878	188	.....	13	444
Medical compound .....	W. J. Klapp .....	206, 676	Aug. 6, 1878	20	.....	14	209
Medical compound .....	A. Owen .....	200, 331	Feb. 12, 1878	452	.....	13	310
Medical compound .....	J. Powers .....	207, 368	Aug. 27, 1878	702	.....	14	314
Medical compound .....	A. A. Solomons .....	204, 629	June 4, 1878	206	.....	13	1041
Medical compound .....	J. W. B. Turk .....	210, 477	Dec. 3, 1878	90	.....	14	836
Medical compound .....	C. C. Wainwright .....	203, 965	May 21, 1878	790	.....	14	940
Medical powders, Machine for putting up ..	W. E. Heeren .....	109, 645	Jan. 29, 1878	989	288	13	186
Medicament, Coated compressed .....	C. Carter .....	207, 013	Aug. 13, 1878	374	115	14	256
Medicament for catarrh .....	J. W. Blosser .....	208, 064	Sept. 17, 1878	526	.....	14	424
Medicated oil .....	J. H. Normand and L. Dufilho ..	201, 194	Mar. 12, 1878	375	.....	13	479
Medicinal beverage .....	R. B. Wood .....	205, 713	July 2, 1878	266	.....	14	42
Medicinal compressed wafers, pills, lozenges, &c., Mold for making .....	C. Carter .....	206, 536	July 30, 1878	1230	354	14	180
Medicine-case .....	J. C. Litzelle .....	207, 350	Aug. 27, 1878	755	225	14	314
Melting-furnace, Reversible .....	A. Piat .....	210, 707	Dec. 10, 1878	351	96	14	878
Metal bars, Machine for coiling .....	G. F. Evans .....	207, 802	Sept. 10, 1878	233	73	14	362
Metal bars, Machine for drawing and straightening ..	L. Brightman .....	200, 251	Feb. 12, 1878	366	108	13	297
Metal bars, Machine for edging, sizing, and straight- ening non-cylindrical .....	J. S. Seaman .....	209, 588	Nov. 5, 1878	51	15	14	688
Metal-blank-forming machines, Attachment to .....	M. L. Bassett .....	207, 840	Sept. 10, 1878	273	84	14	387
Metal can .....	G. Browne .....	199, 616	Jan. 29, 1878	962	279	13	182
Metal cans, Machine for crimping and beading sheet ..	F. A. Walsh .....	205, 844	Aug. 6, 1878	192	61	14	230
Metal-drill, Upright .....	O. Plummer .....	207, 206	Aug. 20, 1878	583	175	14	286
Metal-founders' ladle .....	G. F. Butterfield .....	209, 223	Oct. 22, 1878	856	248	14	620
Metal from waste solution, Separating .....	J. Tunbridge .....	207, 695	Sept. 3, 1878	109	33	14	363
Metal-heating furnace .....	J. McCrea .....	202, 566	Apr. 16, 1878	768	221	13	712
Metal, Machine for expanding and contracting .....	G. W. Ford .....	201, 403	Mar. 19, 1878	620	189	13	519
Metal, Machinery for working masses of .....	P. G. B. Westmacott .....	203, 303	May 7, 1878	73	22	14	830
Metal pipe, Machinery for seaming, grooving, and beading .....	F. M. Irons .....	201, 182	Mar. 12, 1878	364	113	13	477
Metal-rakes, Manufacture of .....	E. Sims .....	199, 111	Jan. 8, 1878	397	118	13	78
Metal-separator, Magnetic .....	B. Fitts .....	208, 163	Sept. 17, 1878	633	186	14	439
Metal-shears .....	W. G. Collins .....	208, 888	Oct. 15, 1878	477	137	14	564
Metals from their ores, Extracting .....	J. Prosser .....	206, 610	July 30, 1878	1311	.....	14	190
Metals, Product and method of coating and preserv- ing .....	A. P. G. Dumesnil .....	208, 674	Oct. 8, 1878	233	.....	14	528
Metals, Separating molten .....	F. J. Seymour .....	199, 475	Jan. 22, 1878	784	239	13	146
Metallic can .....	J. Broughton .....	209, 009	Oct. 15, 1878	609	177	14	581
Metallic can .....	C. Green and W. Wilson, Jr. ....	201, 666	Mar. 26, 1878	894	272	13	562
Metallic can .....	G. L. Harrison, Jr. ....	211, 011	Dec. 17, 1878	707	195	14	931
Metallic can .....	C. P. Maxfield .....	199, 018	Feb. 5, 1878	23	10	13	237
Metallic can .....	G. H. and J. H. Perkins .....	201, 122	Mar. 12, 1878	308	94	13	498
Metallic can .....	G. H. and J. H. Perkins .....	202, 371	Apr. 16, 1878	559	163	13	686
Metallic can .....	G. H. Perkins and G. Brown .....	211, 042	Dec. 17, 1878	757	208	14	936
Metallic fastener .....	G. W. McGill .....	210, 048	Nov. 19, 1878	566	170	14	764
Metallic fastening .....	G. W. McGill .....	199, 085	Jan. 8, 1878	372	110	13	75
Metallurgic furnace .....	T. D. Morgan .....	202, 743	Apr. 23, 1878	999	278	13	745
Metallurgic furnace .....	H. Swindell .....	204, 392	May 28, 1878	1258	359	13	1002
Metallurgic furnace .....	W. Swindell .....	210, 369	Nov. 26, 1878	929	.....	14	815
Metallurgic furnace .....	W. M. Watson .....	206, 374	July 23, 1878	1044	300	14	152
Metallurgic gas-furnace .....	W. S. Gillen .....	199, 362	Jan. 22, 1878	677	198	13	129
Metallurgic gas-furnace .....	C. Gröbe .....	207, 177	Aug. 20, 1878	552	165 166 179 180	14	282
Metallurgic gas-furnace .....	W. Swindell .....	207, 221	Aug. 20, 1878	596	.....	14	288
Meter:							
See Electric meter.      Steam-meter.							
Fluid-meter.      Steam-diaphragm meter.							
Gas-meter.      Water-meter.							
Grain-meter.							
Micrometer-gage .....	G. M. Pratt .....	202, 866	Apr. 23, 1878	1102	316	13	763
Microscope .....	J. J. Bausch .....	199, 015	Jan. 8, 1878	396	90	13	63
Microscope .....	R. B. Tolles .....	198, 782	Jan. 1, 1878	65	16	13	17
Microscope .....	R. B. Tolles .....	198, 783	Jan. 1, 1878	66	16, 17	13	17
Microscopes, Object-glass for .....	E. Gundlach .....	198, 914	Jan. 1, 1878	198	56	13	39
Middlings-bolt .....	G. S. Cranston .....	210, 102	Nov. 12, 1878	628	186	14	772
Middlings-bolt .....	M. Inskeep .....	209, 050	Oct. 15, 1878	660	190	14	588
Middlings, Machine for preparing and treating ..	F. Wegmann .....	199, 005	Jan. 22, 1878	921	270	13	168
Middlings purifying and separating machine .....	G. Milbank .....	198, 775	Jan. 1, 1878	54	14, 15	13	16
Middlings-separator .....	W. S. Burroughs .....	205, 724	July 9, 1878	296	87	14	50
Middlings-separator .....	W. J. Fender .....	209, 165	Oct. 22, 1878	799	232	14	611
Middlings-separator .....	W. H. Fruen .....	206, 869	Aug. 13, 1878	231	74	14	239

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Middlings-separator	L. Gathmann	201,234	Mar. 12, 1878	419	129	13	485
Middlings-separator	L. Gathmann	201,235	Mar. 12, 1878	420	129	13	485
Middlings-separator	A. Morley	209,182	Oct. 22, 1878	819	237	13	614
Middlings-separator	T. Newell	204,681	June 11, 1878	265	82	13	1033
Middlings-separator	J. W. Pyne	210,558	Dec. 3, 1878	180	48	14	847
Middlings-separator	C. H. Sinderson	202,198	Apr. 9, 1878	363	106	13	654
Middlings-separator	G. T. Smith	203,933	Oct. 15, 1878	530	155 156	13	571
Military accouterments	C. Harkins	204,322	May 23, 1878	1188	338	13	994
Military accouterments	G. H. Palmer	202,673	Apr. 23, 1878	888	255	13	738
Military tactics, Apparatus for demonstrating	W. H. Brownell	206,420	July 30, 1878	1110	317	13	165
Milk and provision rack	R. A. Bassett	205,170	June 25, 1878	807	240	13	1131
Milk, Apparatus for separating cream from	P. Shaw	107,822	Sept. 10, 1878	253	79	14	384
Milk-boiler	L. Hensel	211,014	Dec. 17, 1878	710	106	14	921
Milk-can	W. J. Alrich	203,694	May 14, 1878	495	140	13	894
Milk-cans, Locking, sealing, and labeling	P. Shaw	207,627	Sept. 3, 1878	42	14	14	354
Milk-cooler	M. S. Allyn	207,584	Sept. 3, 1878	1	1	14	349
Milk-cooler	O. S. Bliss	109,404	Jan. 22, 1878	717	211	13	136
Milk-cooler	S. R. Bryant	207,608	Aug. 13, 1878	370	113	14	255
Milk-cooler	L. W. Center	109,548	Nov. 5, 1878	11	4	14	682
Milk-cooler	A. C. Clark	205,859	July 9, 1878	421	120	14	66
Milk-cooler	S. Hill and B. B. Prentice	207,733	Sept. 3, 1878	157	48	11	269
Milk-cooler	G. R. Ingalls	206,792	Aug. 6, 1878	142	44	14	224
Milk-cooler	F. K. Manahan	206,340	July 23, 1878	1005	287	14	148
Milk-cooler	C. Peck and R. R. Ball	205,295	June 25, 1878	938	278	13	1148
Milk-cooler	M. F. Potter	209,420	Oct. 29, 1878	1063	309	14	652
Milk-cooler	L. W. Truesdell	205,155	June 18, 1878	781	231	13	1123
Milk-cooler	F. K. Ward	210,277	Nov. 26, 1878	825		14	802
Milk-cooler	W. H. White	202,129	Apr. 9, 1878	201	85	13	644
Milk-cooler	D. B. Wooster	205,777	July 9, 1878	353	102	14	57
Milk-cooling apparatus	V. P. and J. S. Hill	206,108	July 16, 1878	714	206	14	108
Milk, Device for separating cream from	S. L. Plumb	208,846	Oct. 8, 1878	426	123	14	553
Milk, Device for setting and skimming	R. Lapham	207,664	Sept. 3, 1878	82	25	14	359
Milk jar and can	G. H. Lester	109,837	Jan. 20, 1878	1172	344	13	214
Milk-pan cover	C. C. Fairbank	208,900	Oct. 15, 1878	491	142	14	566
Milk-stirrer	H. O. Freeman	201,771	Mar. 26, 1878	1001	506	13	578
Milk, Vessel for setting	J. W. Powers	203,852	May 21, 1878	670	190	13	924
Milker, Cow	S. G. Major	209,277	Oct. 22, 1878	909	265	14	677
Milker, Cow	D. F. Perkinson	200,820	Aug. 6, 1878	164	52	14	227
Milking apparatus, Cow	W. F. George	204,314	May 28, 1878	1170	336	13	998
Mill:							
See Bark-grinding mill.	Paint-mill.						
Cane-mill.	Pepper-mill.						
Chopping or grinding mill.	Pulverizing-mill.						
Cider-mill.	Rice pounding and hulling mill.						
Coffee-mill.	Roller-mill.						
Coffee and spice mill.	Rolling-mill.						
Disintegrating-mill.	Saw-mill.						
Fanning-mill.	Stamp-mill.						
Fulling-mill.	Tread-mill.						
Grinding-mill.	Vertical mill.						
Horn-mill.	Water-mill.						
Horse-power mill.	Windmill.						
Ore-mill.							
Mill-feeding apparatus	D. P. Sulouff	199,877	Jan. 29, 1878	4207	354	13	220
Mill for reducing grain	C. A. W. Jaquett	199,070	Jan. 8, 1878	356	105	13	72
Mill pick	W. B. Morris	198,096	Jan. 8, 1878	288	84	13	60
Mill-pick	A. W. Straub	202,209	Apr. 9, 1878	465	136	13	609
Mill-spindle	J. W. Porter	206,483	July 30, 1878	1177	337	14	173
Mill-spindle	J. M. Quisenberry	205,504	July 2, 1878	42	13	14	14
Mill-spindle	J. M. Keplegle	210,268	Nov. 26, 1878	815	241	14	801
Mill-spindle bush and tram	E. G. Cushing	200,430	Feb. 19, 1878	545	167	13	536
Mill-spindle step	D. Harrington	208,733	Oct. 8, 1878	285	85	14	580
Millstone-balancing device	J. P. Moore	199,088	Jan. 8, 1878	374	111	13	75
Millstone-cooling apparatus	W. Daniels	204,542	June 4, 1878	111	37, 38	13	1028
Millstone-curb and chop-conveyor	C. Galigher	210,021	Nov. 19, 1878	542	162	14	760
Millstone-displacing apparatus	J. B. Cromwell	208,297	Sept. 24, 1878	789	230	14	461
Millstone-dress	E. S. Cox	208,710	Oct. 8, 1878	278	79	14	534
Millstone-dress	R. L. Duncan	205,533	July 2, 1878	73	21	14	18
Millstone-dress	T. D. Jones	205,550	July 2, 1878	100	29	14	21
Millstone-dress	S. Keim	205,557	July 2, 1878	101	29	14	22
Millstone-dress	W. D. Odendahl	206,903	Aug. 13, 1878	820	99	14	250
Millstone-dresser	T. P. Benton	201,865	Apr. 2, 1878	7	2	13	600
Millstone dressing device	R. Lytle	199,840	Jan. 29, 1878	1175	345	13	215
Millstone-dressing machine	W. Griscom and T. McFeely	206,316	July 23, 1878	972	276	14	144
Millstone-dressing machine	R. Lytle	199,830	Jan. 29, 1878	1174	344 345	13	215
Millstone-dressing machine	D. Narracong	211,037	Dec. 17, 1878	747	204	14	936
Millstone-driver	W. S. Bacon	208,281	Sept. 24, 1878	773	226	14	459
Millstone-driver	P. H. Childress	207,014	Aug. 13, 1878	375	115	14	256
Millstone-driver	P. H. Childress	210,498	Dec. 3, 1878	111	29	14	858
Millstone-driver	J. W. Donnell	207,401	Aug. 27, 1878	794	236	14	317
Millstone-driver	F. G. Dornier	209,961	Nov. 19, 1878	474	143	14	752
Millstone-driver	W. E. Sergeant	201,653	Mar. 5, 1878	233	74	13	451
Millstone-driver	D. T. Staples	202,069	Apr. 2, 1878	209	61	13	628
Millstone-exhaust	D. Brubaker	199,688	Jan. 29, 1878	1034	301	13	207
Millstone-exhaust	F. Teeple	200,949	Mar. 5, 1878	126	41	13	455
Millstone-exhaust apparatus	S. L. Bean	207,585	Sept. 3, 1878	2	1	14	349
Millstone-exhaust apparatus	M. Martin	211,033	Dec. 17, 1878	742	203	14	935
Millstone-exhaust apparatus	J. Phippen	206,680	Aug. 6, 1878	33	9	14	210
Millstone-feed regulator	C. P. Kemmerer	199,371	Jan. 22, 1878	685	201	13	130
Millstone-feed regulator	W. Steele	199,501	Jan. 22, 1878	906	265	13	166
Millstone-feeder	G. Pfeiffer	209,356	Oct. 20, 1878	1000	291	14	644
Millstone-pick	H. D. Coleman	199,060	Feb. 5, 1878	70	22	13	244

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Millstone-pick.....	F. Sondermeyer.....	203,502	May 14, 1878	365	103	13	879
Millstone-ventilator.....	G. Moench.....	203,181	Apr. 30, 1878	1430	417	13	809
Millstone-ventilator.....	H. F. Stinde.....	203,510	July 2, 1878	48	15	14	15
Millstones, Balancing.....	H. H. Kendrick.....	202,731	Apr. 23, 1878	954	274	13	743
Millstones, Circular metal proof-staff for testing.....	J. W. Henschelrode.....	208,239	Sept. 24, 1878	726	213	14	453
Millstones, Cleansing.....	H. B. Varna.....	208,441	Sept. 24, 1878	937	.....	14	480
Millstones, Dressing.....	B. D. Sanders.....	208,269	Sept. 24, 1878	762	.....	14	458
Millstones, Furrow-gage staff for dressing.....	H. D. Alfthather.....	209,373	Oct. 29, 1878	1020	206	14	645
Millstones, Lubricating-bearing for.....	J. W. Batty.....	202,218	Apr. 9, 1878	383	112	13	657
Millstones, Middlings-feeder for.....	F. T. Shrake.....	206,047	July 16, 1878	650	189	14	100
Millstones while at work, Device for leveling and tramming.....	J. T. Beckwith.....	203,578	May 21, 1878	694	190	13	927
Miner's squib.....	G. Hayes.....	200,193	Feb. 12, 1878	310	92	13	280
Mines, Air-exhauster for coal.....	T. W. Flynn.....	206,101	July 16, 1878	704	203	14	107
Mining apparatus, Hydraulic.....	G. W. Cranston.....	209,661	Nov. 5, 1878	138	40, 41	14	609
Mining coal, Machine for.....	J. Blyth.....	208,361	Sept. 24, 1878	855	249	14	400
Mining-riffle.....	C. O. Bagley.....	207,153	Aug. 20, 1878	526	158	14	279
Mining, Washer and amalgamator for hydraulic.....	B. Tyson.....	208,773	Oct. 8, 1878	340	98	14	541
Mirror.....	H. S. Wood.....	202,621	Apr. 16, 1878	824	238	13	719
Mirror and other frames.....	G. Eastman.....	201,394	Mar. 19, 1878	604	185	13	517
Mirror attachment.....	G. H. Wilcox.....	207,579	Aug. 27, 1878	998	292	14	343
Mirror for exhibiting samples, Multiplying.....	L. G. Francis.....	205,375	June 25, 1878	1023	304	13	1159
Mirror, Hat.....	F. J. Hoyt.....	201,016	Mar. 5, 1878	194	62	13	445
Mirrors, brushes, &c., Composition frame for.....	G. Eastman.....	203,251	May 7, 1878	15	6	13	823
Mirrors, Silvering glass.....	T. Carney.....	201,497	Mar. 10, 1878	705	.....	13	532
Miter-clamp.....	F. P. Moser.....	207,295	Aug. 20, 1878	674	200	14	298
Miter-machine.....	G. Lennartson.....	202,445	Apr. 16, 1878	632	185	13	696
Mitering-machine.....	W. E. Eastman.....	201,657	Mar. 20, 1878	887	270	13	561
Mixer: See Dough-mixer.....							
Moccasin.....	J. G. Pitts.....	203,851	May 21, 1878	669	189	13	924
Molasses-sampling glass.....	W. M. Rich.....	201,448	Mar. 10, 1878	650	201	13	525
Mold: See Butter-mold..... Crayon-mold. Car-wheel mold..... Dental-plate mold. Chill-mold..... Glass-mold. Cigar-mold..... Ingot-mold. Core-mold.....							
Molded articles, Composition for manufacturing.....	W. H. Dibble.....	202,636	Apr. 23, 1878	859	.....	13	733
Molded articles, Composition for.....	J. B. Hayden.....	198,884	Jan. 1, 1878	167	.....	13	34
Molder's flask.....	C. H. Porter.....	202,464	Apr. 16, 1878	650	190	13	690
Molder's flask, Hinge for.....	A. Barker.....	200,422	Feb. 19, 1878	553	163	13	334
Molding and carving machine.....	C. F. H. Huff.....	206,570	July 30, 1878	1271	365	14	185
Molding in sand, Machine for.....	W. Aikin and W. W. Drummond.....	201,377	Mar. 10, 1878	589	181	13	515
Molding-machine.....	J. Hackett.....	209,256	Oct. 22, 1878	885	{ 257 238 }	14	624
Molding-machine.....	H. Reynolds.....	198,856	Jan. 1, 1878	135	38	13	29
Molding-machine.....	H. Reynolds.....	203,778	May 14, 1878	582	163	13	905
Molding-machine and wood-molding.....	G. S. Roberts.....	208,202	Sept. 17, 1878	667	197	14	443
Molding-machine, Founder's.....	G. E. Smith.....	201,636	Mar. 26, 1878	868	{ 264 265 294 295 }	13	558
Molding machine, Variety.....	S. J. and G. J. Shimer.....	206,360	July 23, 1878	1026	{ 294 295 }	14	151
Moldings for gilding, Machine for preparing.....	C. C. Stuart.....	206,149	July 16, 1878	765	220	14	113
Moldings, Machine for filling.....	H. S. Swayne.....	201,960	Apr. 2, 1878	95	27, 28	13	613
Moldings, Machine for polishing.....	C. G. Purdy.....	199,166	Jan. 15, 1878	472	139	13	89
Moldings, Machine for veneering.....	J. A. Davton.....	203,496	May 21, 1878	714	205	13	930
Moldings, Ornamenting.....	W. Wallick.....	205,930	July 9, 1878	519	147	14	78
Money-bag fastener.....	W. H. Sanford.....	204,615	June 4, 1878	196	62	13	1040
Mop.....	H. L. Franklin.....	208,165	Sept. 17, 1878	635	187	14	439
Mop.....	J. McCarthy.....	210,953	Dec. 17, 1878	640	177	14	923
Mop and brush holder.....	M. N. Lovell.....	210,427	Dec. 3, 1878	30	9	14	829
Mop and brush holder.....	M. N. Lovell.....	210,428	Dec. 3, 1878	40	9	14	829
Mop-head.....	L. F. Brooks.....	205,831	July 9, 1878	414	117	14	65
Mop-head.....	J. Porter.....	204,605	June 4, 1878	178	57	13	1038
Mop-heads and wringers to pails, Clamp for attaching.....	L. Grube.....	201,005	Mar. 5, 1878	183	59	13	443
Mop holder and wringer.....	J. L. Sanford and W. P. Sampson.....	203,378	May 7, 1878	150	43	13	841
Mop-wringer.....	W. Haas.....	204,215	May 28, 1878	1082	308	13	980
Mop-wringer.....	F. J. Robinson.....	204,885	June 11, 1878	445	130	13	1074
Mop-wringer.....	H. Russell.....	203,501	May 7, 1878	270	79	13	858
Mop-wringer.....	C. A. Vaile.....	206,371	July 23, 1878	1042	299	14	152
Mordants and dye-stuffs, Composition to be used as.....	S. Cabot, jr.....	204,130	May 28, 1878	986	.....	13	968
Mortar, Composition for black.....	C. A. Didden.....	199,420	Jan. 22, 1878	733	.....	13	138
Mortising and boring machine.....	R. L. and R. S. Greenlee.....	199,285	Jan. 15, 1878	586	{ 171 172 }	13	107
Mortising-machine.....	D. E. Henderson.....	204,569	June 4, 1878	137	46	13	1032
Mortising-machine.....	S. Stone.....	210,162	Nov. 19, 1878	688	{ 264 265 }	14	789
Mosquito-bar frame.....	J. F. O'Sullivan and E. Bloom.....	204,243	May 28, 1878	1110	317	13	983
Mosquito-bar frame.....	C. E. Rhodes.....	203,291	May 7, 1878	60	19	13	828
Mosquito-bar, Portable.....	A. A. Cowing.....	199,695	Jan. 29, 1878	1040	303	13	194
Mosquito-net frame.....	E. Bloom.....	204,187	May 28, 1878	1056	300	13	970
Mosquito-net frame.....	H. Nyvall.....	199,566	Jan. 22, 1878	877	257	13	161
Moth-traps for trees, &c., Machine for manufacturing.....	E. Ruhlmann.....	206,619	July 30, 1878	1318	379	14	191
Motion, Apparatus for converting.....	W. N. Willis.....	201,143	Mar. 12, 1878	330	101	13	471
Motion, Apparatus for regulating reciprocating.....	A. M. Rouse.....	202,052	Apr. 2, 1878	191	56	13	626
Motion, Apparatus for transmitting and converting.....	J. Titus.....	208,650	Sept. 17, 1878	514	153	14	423
Motion, Converting.....	M. Kaefel.....	208,397	Sept. 24, 1878	889	259	14	474
Motion, Converting.....	W. Meyers.....	208,325	Sept. 24, 1878	817	239	14	465
Motion, Converting.....	C. W. Schröder and F. J. Jörgensen.....	206,832	Aug. 6, 1878	176	56	14	228
Motion, Converting reciprocating into rotary.....	E. Meredith.....	200,556	Feb. 19, 1878	684	201	13	354
Motion, Device for converting.....	C. Cole.....	205,055	June 18, 1878	677	198	13	1109
Motion, Device for converting.....	A. G. Smyth.....	202,880	Apr. 23, 1878	1118	321	13	764



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Motion, Device for converting reciprocating into rotary.	W. T. Burrows	209, 456	Oct. 20, 1878	1102	{ 320 221	14	658
Motion, Device for transmitting	H. C. Hunter and J. Everding	203, 155	Apr. 30, 1878	1404	410	13	506
Motion, Device for transmitting	G. H. Russell	210, 469	Dec. 3, 1878	82	21	14	835
Motion, Device for transmitting	E. Vicatre	210, 478	Dec. 3, 1878	90	23	14	836
Motion, Device for transmitting and arresting	B. P. Cloud	201, 868	Apr. 2, 1878	11	3	13	600
Motion, Double rack for reciprocating	C. Potter, Jr., and J. F. Hubbard	210, 769	Dec. 10, 1878	353	97	14	878
Motion, Mechanism for transmitting	J. S. Adams	205, 331	June 25, 1878	980	290	15	1154
Motive power	M. C. Kummerer and C. W. Widney	203, 350	May 7, 1878	117	34	13	836
Motive power	J. E. Woolverton	206, 062	July 16, 1878	067	192	14	102
Motive power, Utilizing bisulphide of carbon as a	R. Kreuzbauer	210, 840	Dec. 17, 1878	498	141	14	936
Motive power, Portable jack for	D. Luse	206, 804	Aug. 6, 1878	150	47	14	225
Motor:							
See Car-motor.	Sewing-machine motor.						
Churn-motor.	Spring-motor.						
Dental-engine motor.	Water-motor.						
Electric motor.	Weight-motor.						
Fan-motor.	Windmill-motor.						
Hydraulic motor.							
Motor	W. K. Azbill	202, 626	Apr. 23, 1878	848	244	13	731
Motor	J. K. Cummings	200, 516	Feb. 19, 1878	640	188	13	348
Motor	W. Dickinson	210, 760	Dec. 10, 1878	406	{ 111 112	14	885
Motor	J. F. Driver, J. T. Luna, W. H. Sanders, and A. P. Hill	207, 403	Aug. 27, 1878	796	237	14	319
Motor	W. D. Edgar and W. S. Day	201, 761	Mar. 26, 1878	987	{ 301 302	13	576
Motor	D. Ford	208, 519	Oct. 1, 1878	64	19	14	498
Motor	C. C. Gish	201, 665	Mar. 26, 1878	893	272	13	562
Motor	C. Huebner	201, 923	Apr. 2, 1878	64	17	13	608
Motor	L. P. King and A. M. White	207, 186	Aug. 20, 1878	561	{ 168 169	14	283
Motor	G. S. Petry	203, 765	May 14, 1878	567	160	13	904
Motor	A. R. Steel	205, 814	July 9, 1878	396	113	14	63
Motor for propelling vehicles or mechanical horses.	J. Doyle	200, 286	Feb. 12, 1878	384	114	13	300
Mower	W. R. Baker	210, 232	Nov. 26, 1878	776	231	14	798
Mower	R. Eickemeyer	201, 390	Mar. 19, 1878	605	186	13	517
Mower	J. Harris	200, 289	Feb. 12, 1878	404	{ 120 121	13	303
Mower	W. A. Kirby	206, 116	July 16, 1878	727	209	14	169
Mower	G. S. Peck	199, 992	Feb. 5, 1878	99	33	13	249
Mower	J. Tildsley	206, 278	July 23, 1878	928	263	14	139
Mower	G. W. N. Yost and R. D. Warner	209, 846	Nov. 12, 1878	344	103	14	731
Mower and reaper knives, Machine for sharpening	H. F. and M. L. Bush	200, 170	Feb. 12, 1878	200	86	13	288
Mower-knife sharpening-tools, Holder for	F. R. Caden and T. H. McCray	192, 261	Jan. 15, 1878	562	165	13	163
Mower, Lawn	J. Braun	208, 788	Oct. 8, 1878	352	102	14	543
Mower, Lawn	E. A. Hildreth	201, 012	Mar. 5, 1878	189	60, 61	13	444
Mower, Lawn	F. G. Johnson	204, 153	May 28, 1878	1013	288	13	971
Mower, Lawn	J. Lusher	210, 794	Dec. 10, 1878	443	{ 123 124	14	890
Mower, Lawn	A. P. Osborne	204, 242	May 28, 1878	1109	316	13	963
Mower, Lawn	A. P. Osborne	210, 625	Dec. 10, 1878	268	73	14	867
Mower, Lawn	A. H. Rau	207, 096	Aug. 13, 1878	423	131	14	262
Mower, Lawn	C. A. Wright	208, 355	Sept. 24, 1878	847	247	14	469
Mowers, Attachment for lawn	W. D. Myers	210, 654	Dec. 10, 1878	300	82	14	571
Mowing-machine	L. D. Minnick	210, 622	Dec. 10, 1878	263	72	14	867
Mucilage-bottle stopper	H. T. Cushman	205, 247	June 25, 1878	889	263	13	1142
Mucilage-holder	S. S. Newton	201, 270	Mar. 12, 1878	466	143	13	491
Mucilage-holder	S. S. Newton	210, 872	Dec. 17, 1878	540	152	14	911
Mucilage-holder	G. W. Ross	201, 127	Mar. 12, 1878	313	96	13	469
Mucilage-holder	J. W. Silabee	204, 625	June 4, 1878	203	65	13	1041
Mud-pipe cleaner	H. Green	201, 410	Mar. 19, 1878	624	190	13	520
Muff	J. H. Kappelhoff	209, 271	Oct. 22, 1878	903	263	14	626
Music-box	W. Meissner	204, 356	May 28, 1878	1223	348	13	998
Music-holder, Adjustable	L. D'Auria	200, 262	Feb. 12, 1878	380	112	13	300
Music-leaf turner	C. L. Bayrd and S. Paul	205, 826	July 9, 1878	407	116	14	64
Music-leaf turner	W. Liddel	198, 990	Jan. 8, 1878	281	81	13	59
Music-leaf turner	J. J. Ougheltree	209, 287	Oct. 25, 1878	916	287	14	628
Music-rack	H. Warner	201, 514	Mar. 12, 1878	511	156	13	496
Musical instrument	L. Chase	210, 297	Nov. 26, 1878	847	249	14	805
Musical instrument, key-board	C. Brown	205, 044	June 18, 1878	065	105	13	1107
Musical instrument, Mechanical	O. H. Arno	198, 866	Jan. 1, 1878	145	42	13	41
Musical instrument, Mechanical	J. H. Chaso	204, 949	June 18, 1878	575	168	13	1695
Musical instrument, Mechanical	M. Gally	203, 257	May 7, 1878	21	8	13	83
Musical instrument, Mechanical	M. Gally	210, 249	Nov. 26, 1878	763	236	14	798
Musical instrument, Mechanical	H. B. Horton	210, 424	Dec. 8, 1878	39	8	14	828
Musical instrument, Mechanical	M. R. Marshallman and M. J. Matthews	209, 492	Oct. 29, 1878	1136	332	14	663
Musical instrument, Mechanical	M. J. Matthews	204, 352	May 28, 1878	1219	347	13	997
Musical instruments, Chart for key-board	F. E. Mason	201, 030	Mar. 5, 1878	211	66	13	417
Musical instruments, Mouth-piece for	J. G. True	200, 007	Feb. 5, 1878	111	37	13	251
Musical instruments, Note-indicator for	G. Woods	210, 888	Dec. 17, 1878	560	157	14	913
Musical instruments, Valve-action for brass	T. Artaud	201, 380	Mar. 19, 1878	591	181	13	515
Musical notation	L. D. Holtermann	205, 387	June 25, 1878	1038	308	13	1161
Musical string-instruments, Key for	F. Z. Niehler	208, 985	Oct. 15, 1878	582	169	14	578
Musical transposing-board	L. Anderson	204, 876	June 18, 1878	499	145	13	1685
Mustache-guard	C. H. Burrows	204, 125	May 28, 1878	982	279	13	967
Mustard pot and spoon	H. J. White	204, 930	June 18, 1878	557	162	13	1682
Muzzle, Calf	R. S. Hazen, sr	199, 156	Jan. 15, 1878	462	136	13	88
Myopia, Device for preventing	D. Morse	207, 198	Aug. 20, 1878	575	172	14	285

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Nail:	N.						
See Horseshoe-nail.	Shoe-nail.						
Picture-nail.							
Nail and spike extractor.	W. H. Barwick.	207,098	Aug. 20, 1878	477	143	14	273
Nail-extractor.	J. C. Chapman.	204,536	June 4, 1878	106	36	13	1027
Nail-extractor.	C. F. Knauer.	210,041	Nov. 13, 1878	500	168	14	763
Nail machine, Cut.	J. W. Chewning, jr.	159,791	Jan. 29, 1878	1129	351	13	208
Nail machine, Rotary cut.	R. C. Grant.	198,844	Jan. 1, 1878	121	35	13	27
Nail-plate feeder.	I. Briggs.	210,911	Dec. 17, 1878	596	165	14	918
Nail-plate feeder.	W. Koplin.	211,025	Dec. 17, 1878	723	199	14	933
Nail-plate-feeding mechanism.	C. Ellis.	202,425	Apr. 16, 1878	611	179	13	693
Nail-plates, Pile for manufacturing.	F. J. Hearne.	208,237	Sept. 24, 1878	723	212	14	453
Nail-rods, Machine for finishing.	G. Gilbert.	201,002	Mar. 5, 1878	181	58	13	443
Nails under water, Device for driving.	W. Stack.	207,315	Aug. 20, 1878	692	206	14	300
Name-plate for door-knobs, &c.	E. A. Webster.	200,634	Feb. 26, 1878	776	229	13	376
Nap or plush goods.	T. Goodall.	209,805	Nov. 12, 1878	299	140	14	725
Napkin-holder.	L. Thompson.	202,202	Apr. 9, 1878	367	107	13	655
Napkin-supporter.	M. Burnett.	201,863	Apr. 2, 1878	6	2	13	599
Neck-tie.	J. H. Fleisch.	200,045	Feb. 5, 1878	156	50	13	257
Neck-tie.	J. H. Fleisch.	210,514	Dec. 3, 1878	132	35	14	841
Neck-tie.	W. H. Hart, jr.	211,013	Dec. 17, 1878	709	196	14	931
Neck-tie.	R. Waterhouse.	207,324	Aug. 20, 1878	699	209	14	301
Neck-tie fastener.	T. W. Jones, jr.	201,792	Mar. 26, 1878	1019	311	13	581
Neck-tie fastener.	A. M. Smith.	207,826	Sept. 10, 1878	256	80	14	385
Neck-tie folder.	W. A. Lavery.	207,288	Aug. 20, 1878	668	198	14	297
Neck-tie retainer.	O. P. Hurd.	201,419	Mar. 19, 1878	631	193	13	521
Neck-tie shield.	A. M. Smith and H. H. Thayer.	202,673	Apr. 23, 1878	900	258	13	737
Neck-wear holder.	E. D. Dougherty.	199,195	Jan. 8, 1878	500	147	13	94
Needle.	J. Burrows.	209,018	Oct. 15, 1878	622	180	14	583
Needle-blanks, Machine for turning.	E. Brown.	208,712	Oct. 8, 1878	274	78	14	533
Needle-case.	T. Fletcher.	268,676	Oct. 8, 1878	237	68	14	528
Needle-sharpener.	C. E. Lombard.	201,115	Mar. 12, 1878	302	92	13	467
Needle-swaging machine.	P. M. Beers.	210,289	Nov. 26, 1878	839	247	14	804
Needle-wrapper.	B. M. Thomas.	203,958	May 21, 1878	785	225	13	939
Needle-wrapper.	W. C. Waite.	204,465	June 4, 1878	48	16	13	1019
Needles, Machine for polishing the eyes of.	A. H. Smith.	208,341	Sept. 24, 1878	834	243	14	467
Net, Unloading.	O. Marshall.	208,189	Sept. 17, 1878	658	193	14	442
Nets for horses, Manufacture of fly.	S. Stewart.	210,819	Dec. 10, 1878	469	132	14	893
Netting-machine.	H. W. Thurston.	202,386	Apr. 16, 1878	572	168	13	688
Netting, Machine for making.	W. J. Squire.	203,857	May 21, 1878	675	{ 191 192 }	13	924
Newspaper-folding machine.	C. Kahler.	204,578	June 4, 1878	145	48, 49	13	1033
Newspaper-folding machine.	M. H. Rogers.	205,301	June 25, 1878	944	{ 280 281 }	13	1149
Newspaper wrapping and pasting machine.	P. A. Chalfant.	203,888	May 21, 1878	704	{ 201 202 }	13	929
Nickel, Manufacture of metallic.	E. Weston.	211,670	Dec. 17, 1878	786	.....	14	940
Nickel ores and manufacture of nickel, Working.	J. Garnier.	210,020	Nov. 19, 1878	540	.....	14	760
Nickel-plating.	E. Weston.	211,671	Dec. 17, 1878	787	.....	14	940
Nippers, Cutting.	T. G. Hall.	209,677	Nov. 5, 1878	156	75	14	702
Nipping and clinching tool.	P. Whightsil.	205,021	June 18, 1878	642	189	13	1104
Nipple for nursing-bottles.	E. Siebenlist.	210,157	Nov. 19, 1878	684	203	14	780
Nitro-cellulose, Apparatus and process for the manufacture of.	J. W. Hyatt.	210,611	Dec. 10, 1878	251	69	14	860
Non-conducting compound.	G. R. Evans.	206,007	July 16, 1878	611	.....	14	95
Nozzle.	C. E. Clark.	204,930	June 18, 1878	575	168	13	1095
Nozzle and spout combined, Ventilating.	F. Betts.	200,816	Mar. 5, 1878	2	1	13	415
Nozzle and tap combined.	P. S. Swain.	203,672	May 14, 1878	469	134	13	891
Nozzle, Exhaust.	N. J. White.	208,939	Oct. 15, 1878	533	156	14	571
Nozzle for the escape of steam or gases under pressure.	G. Beck.	207,384	Aug. 27, 1878	777	231	14	316
Numbering-machine.	T. S. Bowman.	206,924	Aug. 13, 1878	290	88, 89	14	246
Numbering-machine.	C. Ewing.	201,401	Mar. 19, 1878	616	188	13	519
Nursery-chair.	F. Caulier.	202,788	Apr. 23, 1878	1015	291	13	752
Nursery-chair.	H. H. Griffin.	206,670	Aug. 6, 1878	12	4	14	208
Nursery-chair.	C. A. Perley.	207,205	Aug. 20, 1878	582	174	14	286
Nut.	A. Wieting.	200,959	Mar. 5, 1878	134	44	13	436
Nut and tap wrench.	J. Goodrich.	210,684	Dec. 10, 1878	330	90	14	875
Nut-blanks, Machine for cutting and punching.	G. B. Hill.	199,546	Jan. 22, 1878	861	252	13	158
Nut-cracker.	F. H. Humphrey.	204,225	May 28, 1878	1091	311	13	981
Nut-cracker.	C. F. Ritchel.	207,897	Sept. 10, 1878	339	102	14	395
Nut-lock.	N. B. Acheson.	201,144	Mar. 12, 1878	331	101	13	471
Nut-lock.	G. O. Bailey, J. A. Emmert, and A. L. Capps.	202,690	Apr. 23, 1878	917	262	13	739
Nut-lock.	E. Bourne.	207,386	Aug. 27, 1878	779	232	14	317
Nut-lock.	W. J. Brassington.	207,006	Aug. 13, 1878	369	113	14	255
Nut-lock.	S. Brunson.	202,407	Apr. 16, 1878	592	174	13	690
Nut-lock.	G. H. Coffee.	205,054	June 18, 1878	676	198	13	1168
Nut-lock.	J. and J. Collman, jr.	200,513	Feb. 19, 1878	638	188	13	347
Nut-lock.	F. B. Davis.	199,191	Jan. 15, 1878	497	146	13	84
Nut-lock.	R. Dunn.	202,249	Apr. 9, 1878	416	121	13	661
Nut-lock.	R. Ely.	204,014	May 21, 1878	846	242	13	946
Nut-lock.	W. S. Gilman.	206,311	July 23, 1878	967	275	13	144
Nut-lock.	G. W. Goodwyn.	200,862	Mar. 5, 1878	47	16	13	422
Nut-lock.	H. Harris.	206,441	July 30, 1878	1133	325	14	168
Nut-lock.	J. L. Hayward.	202,723	Apr. 23, 1878	948	271	13	742
Nut-lock.	R. S. Hazen, jr.	210,530	Dec. 3, 1878	153	40	14	843
Nut-lock.	A. G. and R. Heine.	198,740	Jan. 1, 1878	10	2	13	10
Nut-lock.	H. Hemelright.	206,506	July 30, 1878	1268	364	14	185
Nut-lock.	A. T. Hill.	204,731	June 11, 1878	321	97	13	1060
Nut-lock.	J. S. Hoffecker.	207,275	Aug. 20, 1878	656	194	14	295
Nut-lock.	A. C. Israel.	206,793	Aug. 6, 1878	142	44	14	224
Nut-lock.	R. A. Kelly.	203,464	May 7, 1878	241	69	13	853
Nut-lock.	L. Landecker and H. S. Laird.	199,834	Jan. 29, 1878	1170	343	13	214
Nut-lock.	J. C. Lewis.	207,047	Aug. 13, 1878	404	126	14	260

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Nut-lock .....	J. B. Lowry .....	204,587	June 4, 1878	159	52	13	1035
Nut-lock .....	W. W. Lunt .....	203,169	Apr. 30, 1878	1420	414	13	807
Nut-lock .....	L. D. Maupin .....	203,633	May 14, 1878	426	122	13	886
Nut-lock .....	E. McConnell .....	199,303	Jan. 15, 1878	606	177	13	110
Nut-lock .....	A. Needs .....	202,859	Apr. 23, 1878	1694	313	13	702
Nut-lock .....	J. T. Parks .....	209,831	Nov. 12, 1878	326	97	14	728
Nut-lock .....	J. Pinkham .....	199,099	Jan. 8, 1878	385	115	13	76
Nut-lock .....	W. H. Schall .....	205,306	June 25, 1878	953	282	13	1150
Nut-lock .....	W. P. Seodfield .....	206,359	July 23, 1878	1626	293	14	150
Nut-lock .....	H. C. Stouffer .....	202,603	Apr. 16, 1878	805	232	13	716
Nut-lock .....	W. H. Sutton .....	119,120	Jan. 8, 1878	413	121	13	80
Nut-lock .....	P. Swan and B. E. Riggs .....	201,716	Mar. 26, 1878	939	288	13	569
Nut-lock .....	C. H. Van Arman .....	206,280	July 23, 1878	932	264	14	150
Nut-lock .....	W. Walter .....	202,310	Apr. 9, 1878	477	139	13	650
Nut-lock .....	W. Walter .....	205,222	June 25, 1878	864	255	13	1123
Nut-lock .....	W. Walter .....	205,705	July 2, 1878	258	77	14	41
Nut-lock .....	W. Whitford .....	203,686	May 14, 1878	484	137	13	893
Nut-lock .....	J. W. Whitmarsh .....	205,712	July 2, 1878	265	79	14	42
Nut-machine .....	J. R. Blakeslee .....	204,705	June 11, 1878	289	90	13	1056
Nuts, Machine for tapping .....	J. S. Winsor .....	207,331	Aug. 20, 1878	707	211 212	14	302
O.							
Oakum, Manufacture of .....	W. E. Geer .....	203,723	May 14, 1878	523	.....	13	808
Oar and oar-lock .....	N. B. Cook .....	210,502	Dec. 3, 1878	116	30	14	829
Oatmeal-machine .....	G. Ayldiffe .....	207,152	Aug. 20, 1878	525	158	14	279
Oatmeal-machine .....	C. Bailey .....	208,455	Oct. 1, 1878	1	1	14	489
Oatmeal-machine .....	J. F. Byers .....	210,667	Dec. 10, 1878	312	85	14	873
Oatmeal-machine .....	G. H. Cormack .....	204,137	May 28, 1878	993	282	13	969
Oatmeal-machine .....	G. H. Cormack .....	210,188	Nov. 20, 1878	734	218	14	720
Oatmeal-machine .....	W. Eberhard and H. Turner .....	208,970	Oct. 15, 1878	570	166	14	576
Oatmeal-machine .....	F. W. Kremer and T. G. Williams .....	208,684	Oct. 8, 1878	247	70	14	829
Oatmeal-machine .....	S. Miles .....	204,837	June 11, 1878	439	128	13	1073
Oatmeal-machine .....	D. Oliver .....	204,165	May 28, 1878	1025	292	13	973
Oatmeal-machine .....	D. Oliver .....	205,293	June 25, 1878	936	278	13	1148
Oatmeal-machine .....	F. Schramling, sr., and E. S. Day .....	203,652	May 14, 1878	448	128	13	889
Oatmeal-machine .....	R. Stuart .....	206,148	July 16, 1878	765	219	14	113
Obstetrical supporter .....	J. Loree .....	201,027	Mar. 5, 1878	206	65	13	447
Odometer .....	L. C. Perkins .....	203,070	Apr. 30, 1878	1312	381 382	13	794
Odometer .....	S. T. Whittier .....	201,901	Apr. 2, 1878	43	11	13	765
Odorless closet .....	W. Glover .....	206,874	Aug. 13, 1878	239	75, 76	14	250
Office-indicator .....	J. S. Duffie .....	210,765	Dec. 10, 1878	415	115	14	886
Office-indicator .....	E. H. Glidden .....	208,166	Sept. 17, 1878	636	187	14	439
Oil and other liquids, Can for .....	G. W. Peck .....	208,117	Sept. 17, 1878	577	172	14	431
Oil, Apparatus for storing and discharging .....	S. H. Rhodes .....	204,610	June 4, 1878	185	59	13	1038
Oil-can .....	C. S. S. Baron and C. H. Tallman .....	199,251	Jan. 15, 1878	549	162	13	102
Oil-can .....	C. S. S. Baron and C. H. Tallman .....	199,252	Jan. 15, 1878	550	162	13	102
Oil-can .....	L. Crawford .....	205,728	July 9, 1878	360	88	14	30
Oil-can .....	J. A. Frey .....	200,274	Feb. 12, 1878	392	116	13	301
Oil-can .....	A. E. Gardner .....	209,037	Oct. 15, 1878	641	185	14	585
Oil-can .....	T. J. Griffin .....	205,675	June 18, 1878	657	206	13	1111
Oil-can .....	T. Moran .....	209,578	Nov. 5, 1878	43	12	14	686
Oil, &c., Can for .....	F. Westerbeck .....	207,578	Aug. 27, 1878	998	291	14	343
Oil-can attachment .....	J. H. Stump .....	202,300	Apr. 9, 1878	466	136	13	620
Oil-can jacket .....	L. Peter .....	199,232	Jan. 15, 1878	524	154	13	98
Oil-can spout .....	A. L. Fisher .....	201,513	Mar. 19, 1878	723	220	13	535
Oil-can, Transportation .....	N. Du Brul .....	202,335	Apr. 16, 1878	521	153	13	611
Oil-cans, Implement for holding and operating .....	M. W. Collins and C. F. Boughton .....	202,791	Apr. 23, 1878	1017	292	13	732
Oilcloth, Apparatus for the manufacture of .....	A. F. Buchanan .....	207,491	Aug. 27, 1878	893	263	14	330
Oilcloth, Machine for rubbing .....	A. E. Snow .....	193,753	Jan. 29, 1878	1089	330	13	202
Oilcloth, Making .....	T. Potter .....	205,415	June 25, 1878	1065	.....	13	1164
Oilcloth, Manufacture of floor .....	T. Potter .....	207,679	Sept. 3, 1878	95	29	14	261
Oil-cup .....	T. Holland .....	206,672	Aug. 6, 1878	16	5	14	200
Oil-cup .....	A. D. Kilborn .....	206,579	July 30, 1878	1281	368	14	186
Oil-cup .....	A. D. Kilborn .....	208,245	Sept. 24, 1878	732	214	14	454
Oil-cup .....	A. S. Smith .....	201,362	Mar. 19, 1878	573	176	13	513
Oil-cup, Watchmaker's .....	E. R. Weber .....	200,883	Mar. 5, 1878	68	24	13	425
Oil-drill bit .....	J. Grubs .....	202,023	Apr. 2, 1878	160	46	13	622
Oil from fish, Extracting .....	H. Loring .....	201,884	Apr. 2, 1878	26	7	13	602
Oil from oil-wells, Method of and apparatus for obtaining .....	N. S. Minness and D. A. Wray .....	202,570	Apr. 16, 1878	771	222	13	713
Oil, Machine for treating oleaginous seeds for the extraction of .....	A. B. Lawther .....	202,839	Apr. 23, 1878	1074	307	13	730
Oil-press .....	J. T. Harbine .....	205,637	July 2, 1878	178	53	14	32
Oil-press mat .....	J. T. Harbine .....	206,563	July 30, 1878	1260	363	14	184
Oil-press mat .....	A. C. Lausten and A. B. Lawther .....	204,742	June 11, 1878	331	100	13	1062
Oil-presses, Platen for .....	S. Pratt .....	200,250	Feb. 12, 1878	365	108	13	297
Oil-saver and casing-head .....	E. J. Northrup .....	200,471	Feb. 19, 1878	601	177	13	341
Oil-tank .....	W. and G. Koch .....	206,581	July 30, 1878	1282	368	14	186
Oil-tank .....	F. C. Wilson and Z. H. Boole .....	209,536	Oct. 29, 1878	1191	336	14	670
Oil-tanks, Man-hole cover for .....	W. H. Brock .....	203,817	May 21, 1878	636	179	13	920
Oil, Treating lined .....	H. A. Clark .....	201,992	Apr. 2, 1878	129	.....	13	618
Oils, Apparatus for refining fat .....	H. P. Yaryan .....	205,328	June 25, 1878	977	289	13	1153
Oils by filtration and trickling, Extracting .....	W. Adamson and C. F. A. Simon .....	203,981	May 21, 1878	805	231	13	942
Oils from organic substances, Manufacturing .....	D. M. Buie .....	200,168	Feb. 12, 1878	287	85	13	285
Oils, Palette for testing .....	H. Rouaix .....	209,924	Nov. 12, 1878	419	126	14	741
Oils, Refining fat .....	H. T. Yaryan .....	205,516	July 2, 1878	55	16	14	16
Oiler .....	J. J. Newbaker .....	198,808	Jan. 1, 1878	90	25	13	32
Oiler .....	E. Weston .....	201,140	Mar. 12, 1878	326	100	13	471
Oiler for slide-valves of locomotives .....	O. A. Haynes .....	207,633	Aug. 13, 1878	302	121	14	258
Oiler, Machine .....	S. Hutchinson, jr. ....	202,729	Apr. 23, 1878	952	273	13	743
Oiling slides and guides, Machine for .....	A. N. Bates .....	204,524	June 4, 1878	97	32	13	1028

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Oiling spindles in spinning-frames, Mechanism for	J. H. Prouty and S. S. Sprague	211,047	Dec. 17, 1878	782	209	14	937
Oiling wagon-wheels, Device for	C. Maus	201,259	Mar. 12, 1878	446	138	13	438
Oiling wheel-axles	H. D. Goodrich	201,518	Mar. 10, 1878	729	222	13	535
Ointment	C. J. Beattie	199,684	Jan. 29, 1878	1028		13	102
Opera-chair	R. Mitchell	207,764	Sept. 3, 1878	184	56	14	372
Orange-peeler	T. P. Doane	206,707	Aug. 6, 1878	51	16	14	213
Ordinance, Breech-loading	D. Tufts	203,757	May 14, 1878	602	168	13	608
Ordinance, Loading attachment for	D. D. Johnson	202,174	Apr. 9, 1878	341	100	13	651
Ordinance, Operating heavy	H. C. Bull	209,011	Oct. 15, 1878	612	178	14	581
Ore-crusher	P. W. Gates	202,940	Apr. 30, 1878	1189	343	13	778
Ore-crusher	P. W. Gates	202,941	Apr. 30, 1878	1190	344	13	778
Ore-crusher	E. Gimson	198,936	Jan. 8, 1878	227	64	13	50
Ore-crusher	A. B. Lipsey	203,054	Apr. 30, 1878	1298	377	13	792
Ore-crusher	I. M. Phelps	200,336	Feb. 12, 1878	457	135	13	311
Ore-crusher	S. Stutz	203,793	May 14, 1878	597	167	13	907
Ore-crusher	S. Stutz	203,794	May 14, 1878	599	167	13	907
Ore-crusher and grinder	C. M. Brown	201,646	Mar. 26, 1878	879	267	13	560
Ore-crushing machine	F. R. Brown	206,223	July 23, 1878	864	247	14	130
Ore-desulphurizing furnace	C. Olsted	204,075	May 21, 1878	906	259	13	954
Ore-jigger	S. Bradley	199,502	Jan. 22, 1878	811	238	13	151
Ore-jigger	F. R. Brown	206,418	July 30, 1878	1108	316	14	165
Ore-jigger	W. H. Plumb	204,996	June 18, 1878	620	182	13	1101
Ore-mill	J. W. Foulks	200,790	Feb. 26, 1878	937	276	13	400
Ore, Mill for grinding	W. C. and J. F. Salmon and W. H. Harris	209,838	Nov. 12, 1878	933	99	14	729
Ore, Process and furnace for reducing and smelting	W. E. C. Eustis	209,554	Nov. 5, 1878	16	6	14	683
Ore-pulverizing mill	J. W. V. Rawlins	210,300	Nov. 26, 1878	920	268	14	814
Ore-roaster, Revolving	J. Manes	200,821	Nov. 12, 1878	313	93	14	726
Ore-roaster, Revolving	T. Walker	203,870	May 14, 1878	606	169	13	908
Ore-roasting and desulphurizing furnace	A. Ramago	207,065	Aug. 13, 1878	423	131	14	262
Ore-roasting apparatus	H. F. Howell	198,767	Jan. 1, 1878	46	12	13	15
Ore-roasting furnace	D. J. O'Harra	207,490	Sept. 10, 1878	332	100	14	304
Ore-separator	F. R. Brown	206,417	July 30, 1878	1107	316	14	165
Ore-separator	S. W. Bullock	205,525	July 2, 1878	64	19	14	17
Ore-separator	J. Collom	202,095	Apr. 30, 1878	1241	359	13	784
Ore-separator	E. B. Hastings	207,867	Sept. 10, 1878	305	93	14	391
Ore-separator	D. L. Howard and T. D. Atkinson	206,452	July 30, 1878	1144	328	14	170
Ore-separator	J. G. Jebb	206,115	July 16, 1878	725	209	14	109
Ore-separator	T. S. Lewis	207,878	Sept. 10, 1878	317	96	14	392
Ore-separator	T. S. Lewis	207,879	Sept. 10, 1878	318	96, 97	14	392
Ore-separator	P. Plant	204,083	May 21, 1878	916	262	13	956
Ore-separator	P. Plant	207,622	Sept. 3, 1878	38	12, 13	14	354
Ore-separator	P. Plant	209,674	Oct. 15, 1878	687	199	14	591
Ore-separator	D. C. Roberts	202,122	Apr. 9, 1878	283	83	13	643
Ore-separator	S. Thomas	200,360	Feb. 12, 1878	481	142	13	315
Ore separator, Dry	G. C. Wetmore and F. S. Rice	200,898	Feb. 26, 1878	956	281	13	403
Ore-separators, &c., Apparatus for collecting dust from	J. P. Conkling	199,267	Jan. 15, 1878	571	167	13	104
Ore-washer	T. T. Allen	209,799	Nov. 12, 1878	284	85	14	723
Ore-washer	C. O. Bayley	203,872	May 21, 1878	648	196	13	926
Ore-washer	F. A. Huntington	210,669	Dec. 10, 1878	249	68	14	865
Ore-washer	A. A. Kent	203,547	May 14, 1878	346	99	13	876
Ore washer and amalgamator	J. H. Hobart and J. T. Best	207,870	Sept. 10, 1878	309	94	14	391
Ores, &c., Machine for crushing and grinding	T. McGlew	204,676	June 11, 1878	200	81	13	1052
Organ-action	J. R. Parker	205,499	July 2, 1878	35	12	14	13
Organ action, Reed	L. K. Fuller	199,429	Jan. 22, 1878	739	217	13	139
Organ bellows, Reed	M. J. Matthews	209,496	Oct. 29, 1878	1143	333	14	664
Organ-blower	E. S. Scripture	200,340	Feb. 12, 1878	470	139	13	313
Organ-case	L. C. Carpenter	201,131	May 28, 1878	987	281	13	968
Organ-pedal	J. R. Lomas	208,528	Oct. 1, 1878	73	22	14	490
Organ-pipe	A. A. M. Gaviolé	203,438	May 7, 1878	215	61	13	849
Organ-pipe	A. Geminder	200,449	Feb. 19, 1878	579	171	13	338
Organ, Reed	G. Blatchford	205,341	June 25, 1878	993	294	13	1155
Organ, Reed	H. F. Graetzel	200,528	Feb. 19, 1878	656	193	13	350
Organ, Reed	A. R. Koerber	206,250	July 23, 1878	893	255	14	134
Organ, Reed	M. J. Matthews	209,495	Oct. 29, 1878	1141	333	14	663
Organ, Reed	J. Meissner	200,146	Feb. 12, 1878	265	79	13	282
Organ, Reed	W. L. Menin	201,267	Mar. 12, 1878	455	140	13	489
Organ, Reed	J. R. and S. R. Perry	207,438	Aug. 27, 1878	832	246	14	323
Organ, Reed	J. P. Richardson	205,682	July 2, 1878	235	70	14	38
Organ, Reed	H. W. Smith	205,917	July 9, 1878	505	143	14	76
Organ, Reed	H. W. Smith	207,906	Sept. 10, 1878	348	106	14	396
Organ, Reed	H. W. Smith	207,908	Sept. 10, 1878	350	106	14	396
Organ, Reed	W. O. Trombridge	205,445	June 25, 1878	1095	324	13	1164
Organ, Reed	J. A. Warren and C. W. Coolidge	208,775	Oct. 8, 1878	343	98	14	542
Organ, Reed	H. K. White	203,228	Apr. 30, 1878	1478	433	13	815
Organ, Reed	G. Woods	200,851	Mar. 5, 1878	38	13, 14	13	421
Organ stop-action	W. H. Clarke	199,765	Jan. 29, 1878	1134	333	13	209
Organ stop-action	G. R. Ellis	203,901	May 21, 1878	720	206	13	931
Organ stop-action	H. R. Moore	199,060	Jan. 8, 1878	376	112	13	75
Organ-stop draw-knob	L. L. Hodges	201,674	Mar. 26, 1878	900	275	13	563
Organ tremolo, Reed	F. Ewell	206,068	July 16, 1878	611	176	14	95
Organ valve, Reed	A. S. Field	205,624	July 2, 1878	165	49	14	30
Organ valve, Reed	H. W. Smith	207,907	Sept. 10, 1878	349	106	14	396
Organs, Blow-pedal for	J. H. White	205,160	June 18, 1878	784	232	13	1123
Organs, Tremolo attachment for	J. H. Potter	203,932	May 21, 1878	752	217	13	935
Organs, Valve-tremolo for	J. H. Holden	204,732	June 11, 1878	322	98	13	1060
Ornamenting marble and similar surfaces	G. Hubmann	199,366	Jan. 22, 1878	681		13	130
Ornamenting metallic surfaces for jewelry, &c	W. Riker	199,589	Jan. 22, 1878	892	262	13	164
Ornamenting wood	W. King	201,252	Mar. 12, 1878	438	135	13	487
Ornamenting wood	T. Whitburn	199,129	Jan. 8, 1878	420		13	81

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Oscillating chair.....	G. W. Cummings, jr.....	199,189	Jan. 15, 1878	496	146	13	93
Oscillating chair.....	R. Otto.....	262,576	Apr. 16, 1878	778	224	13	714
Oscillating-piston engine.....	T. F. Sears.....	206,833	Aug. 6, 1878	177	56	14	228
Outtrigger-boat.....	M. F. Davis.....	209,900	Nov. 19, 1878	472	143	14	751
Oven.....	J. R. Heywood.....	210,325	Nov. 26, 1878	877	258	14	869
Oven, Bake.....	M. J. Mosher.....	210,871	Dec. 17, 1878	537	152	14	911
Oven, Baker's.....	J. Kolmle.....	201,883	Apr. 2, 1878	25	7	13	602
Oven, Baker's.....	T. Mayes.....	210,045	Nov. 19, 1878	563	169	14	701
Oven, Baking.....	M. Nichols.....	200,625	Feb. 26, 1878	770	226	13	373
Oven, Coke.....	W. H. Rosewarne.....	208,930	Oct. 15, 1878	525	153	14	570
Oven, Domestic.....	A. M. Blakesley.....	201,736	Mar. 26, 1878	963	294	13	573
Oven-door.....	R. J. King.....	206,180	July 23, 1878	815	253	14	124
Oven, Hot-blast.....	W. A. Miles and J. H. Burghardt.....	208,915	Oct. 15, 1878	507	146	14	568
Oven, Hot-blast.....	J. M. Smith.....	198,820	Jan. 1, 1878	99	28	13	23
Oven, Revolving.....	P. Maltby.....	206,466	July 30, 1878	1159	332	14	171
Oven-shelf.....	R. S. Oliver.....	205,894	July 9, 1878	477	136	14	73
Oven-shelf, Drop-swinging.....	G. H. Phillips.....	201,123	Mar. 12, 1878	309	94, 95	13	468
Overalls.....	S. Lasky.....	201,800	Mar. 26, 1878	1026	313	13	582
Overalls.....	S. Lasky.....	205,801	July 9, 1878	381	169	14	60
Overalls.....	G. Schollan.....	210,713	Dec. 16, 1878	357	98	14	878
Overalls.....	J. H. Willets.....	199,133	Jan. 8, 1878	425	124	13	82
Overcoat.....	J. F. Carter.....	208,151	Sept. 17, 1878	616	182	14	436
Overshoe or gaiter.....	C. Houghton.....	203,152	Apr. 30, 1878	1400	409	13	895
Overshoe, Rubber.....	J. A. Olmstead.....	198,901	Jan. 1, 1878	186	52	13	37
Overshoe, sandal, or boot.....	C. E. Town.....	209,841	Nov. 12, 1878	337	101	14	730
Overshoes, Attachment to rubber.....	J. W. Baker.....	203,813	May 21, 1878	633	178	13	919
Oyster-cooler.....	J. P. Miller.....	209,621	Nov. 5, 1878	93	27	14	693
Oyster-opener.....	P. Helmlich.....	210,032	Nov. 19, 1878	551	165	14	762
Oyster-package.....	F. Pfeiffer.....	209,189	Oct. 22, 1878	827	238	14	615
Oyster-shipment can.....	J. J. Phillips.....	199,569	Jan. 22, 1878	882	258	13	162
Ozone, Apparatus for producing.....	J. Buchanan.....	207,496	Aug. 27, 1878	897	264	14	336
Ozone-generator.....	G. F. H. Bartlett.....	205,340	June 25, 1878	992	294	13	1155
Ozone-generator.....	A. W. Sangster.....	199,997	Feb. 5, 1878	104	34	13	249
P.							
Package-band.....	R. Trautmann.....	210,439	Dec. 3, 1878	52	12	14	831
Package-wrapper.....	G. V. Hecker.....	209,044	Oct. 15, 1878	651	188	14	587
Packing.....	J. O'Meara.....	208,419	Sept. 24, 1878	913	267	14	477
Packing, Asbestos.....	A. D. Furse.....	208,385	Sept. 24, 1878	876	255	14	472
Packing-box.....	I. Popper.....	205,413	June 25, 1878	1064	315	13	1164
Packing-box fastening.....	M. J. Rivard.....	205,420	June 25, 1878	1070	316	13	1165
Packing-boxes, Manufacture of.....	F. Myers.....	203,486	May 7, 1878	262	76	13	836
Packing-boxes, &c., Packing device for.....	A. D. Spencer.....	205,433	June 25, 1878	1082	320	13	1167
Packing-case.....	W. Jordan.....	199,718	Jan. 29, 1878	1058	310	13	197
Packing, Compound for steam.....	J. Johnson.....	199,833	Jan. 29, 1878	1169	311	13	214
Packing, Elastic-welting felt.....	I. Swope.....	199,002	Jan. 8, 1878	293	86	13	61
Packing for condenser-tubes.....	J. W. Mead.....	206,813	Aug. 6, 1878	158	50	14	236
Packing for journal-boxes.....	W. V. Kay.....	209,572	Nov. 5, 1878	40	14	686	
Packing for oil-well casings.....	J. Q. Miller.....	205,804	July 9, 1878	386	111	14	61
Packing for piston and other rods.....	W. Cram.....	203,506	May 14, 1878	396	112	13	882
Packing for piston-rods, &c., Metallic.....	M. H. Gerry.....	208,973	Oct. 15, 1878	572	166	14	576
Packing for pistons, &c., Elastic.....	J. C. Horton and J. Brady.....	207,871	Sept. 10, 1878	312	94	14	332
Packing for stuffing-boxes.....	W. Jagger.....	208,244	Sept. 24, 1878	731	214	14	454
Packing for stuffing-boxes, &c.....	W. F. Kearney.....	201,633	Mar. 26, 1878	906	277	13	564
Packing for stuffing-boxes, Metallic.....	W. Brown.....	208,368	Sept. 24, 1878	861	250	14	470
Packing, Oil-well.....	H. S. Cate.....	202,988	Apr. 30, 1878	1236	337	13	784
Packing, Oil-well.....	L. W. Hoadley.....	203,044	Apr. 30, 1878	1290	373	13	791
Packing, Piston.....	G. Dryden.....	207,555	Sept. 3, 1878	11	4	14	356
Packing, Piston.....	G. R. Nobinger.....	203,639	May 14, 1878	431	124	13	887
Packing, Piston.....	M. Schneble.....	204,766	June 11, 1878	356	107	13	1064
Packing, Piston.....	W. P. Woodruff.....	205,165	June 18, 1878	787	234	13	1123
Packing, Piston-rod.....	A. H. Vitt.....	203,391	May 7, 1878	164	47	13	842
Packing, Piston-rod and valve-stem.....	G. M. Davis.....	210,504	Dec. 3, 1878	118	30, 31	14	829
Packing, Rubber.....	J. Johnson.....	209,270	Oct. 22, 1878	901	261	14	626
Packing, Steam.....	R. Martin.....	210,868	Dec. 17, 1878	534	151	14	910
Packing, Steam.....	E. Robinson.....	205,421	June 25, 1878	1071	317	13	1165
Packing, Steam and hydraulic.....	C. S. C. Symonds.....	204,860	June 11, 1878	457	134	13	1076
Packing, Steam-engine.....	J. W. Edmonds.....	206,548	July 30, 1878	1241	357	14	182
Packing, Steam-engine.....	A. Vivarret.....	206,695	Aug. 6, 1878	40	12	14	211
Packing valve-stems.....	E. M. Luckett and N. Belanger.....	207,668	Sept. 3, 1878	86	26	14	390
Pad.....							
See Bosom-pad.....	Horse-foot pad.....						
Chair-pad.....	Horse-shoe-pad.....						
Furniture-pad.....	Inking-pad.....						
Harness-pad.....	Shoulder-pad.....						
Pad for external applications of medicinal agents.....	E. H. Flagg.....	199,818	Jan. 29, 1878	1155	339	13	212
Paddle-wheel.....	G. L. Elliott.....	210,680	Dec. 10, 1878	326	89	14	875
Paddle-wheel.....	L. Shook.....	200,577	Feb. 19, 1878	764	207	13	357
Paddle-wheel.....	A. Wingard.....	204,180	May 28, 1878	1040	296	13	975
Paddle-wheel, Feathering.....	E. R. Clark and R. Hamilton.....	206,794	Aug. 6, 1878	49	15	14	213
Paddle-wheel, Feathering.....	T. Cullen.....	202,523	Apr. 16, 1878	705	205	13	706
Paddle-wheel, Feathering.....	S. W. Irwin.....	209,267	Oct. 22, 1878	899	262	14	626
Paddle-wheel, Feathering.....	W. C. Smalstig.....	200,578	Feb. 19, 1878	705	207	13	357
Paddle-wheel, Steering.....	C. Krebs.....	209,991	Nov. 12, 1878	395	118	14	728
Paddle-wheels, Adjustable float for.....	G. Brown.....	201,740	Mar. 26, 1878	966	295	13	573
Padlock.....	H. Ahrend.....	206,517	July 30, 1878	1214	349	14	178
Padlock.....	W. F. H. Amwake.....	201,084	Mar. 12, 1878	268	83	13	463
Padlock.....	W. Baldwin.....	210,080	Nov. 19, 1878	604	179	14	769
Padlock.....	W. Bohannan.....	205,171	June 25, 1878	808	240	13	1131



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Padlock	W. H. Bramble	206,528	July 30, 1878	1223	352	14	179
Padlock	H. A. Deraismes	200,990	Mar. 5, 1878	164	53	13	440
Padlock	F. Egge	207,407	Aug. 27, 1878	801	238	14	319
Padlock	J. W. Gable	205,183	June 25, 1878	821	243	13	1133
Padlock	L. Hillebrand	206,327	July 23, 1878	989	281	14	146
Padlock	M. Jacobs	208,603	Oct. 1, 1878	149	43	14	509
Padlock	H. Schroeder	207,310	Aug. 20, 1878	687	205	14	300
Padlock	W. D. Spencer	201,564	Mar. 19, 1878	779	237	13	541
Padlock	W. P. Yoc	198,918	Jan. 1, 1878	202	57	13	39
Padlock, Combination	H. M. King and S. D. Pierce	200,617	Feb. 26, 1878	763	234	13	374
Padlock, Permutation	G. W. Grove	202,022	Apr. 2, 1878	159	46	13	622
Padlock, Permutation	G. C. Ridgway	209,294	Oct. 22, 1878	924	269	14	629
Paging-machine	E. Gorenflo	200,527	Feb. 19, 1878	654	192 193	13	349
Pail and combined hoop and ear	R. H. Stillwell	201,066	Mar. 5, 1878	244	77	13	452
Pail and tub ear	G. W. Stark	201,845	Mar. 26, 1878	1073	326	13	588
Pail, Milk	S. Crane	204,802	June 11, 1878	398	116	13	1069
Pail, Milking	D. G. Rich	203,500	May 7, 1878	275	79	13	858
Paint	M. B. Bailey	207,096	Aug. 20, 1878	476	.....	14	273
Paint	W. H. James	206,574	July 30, 1878	1275	.....	14	186
Paint	M. L. Maloney	206,118	July 16, 1878	729	.....	14	109
Paint can or package	J. W. Masury	207,190	Aug. 20, 1878	568	170	14	284
Paint, Disinfecting	D. E. Breinig	210,664	Dec. 10, 1878	310	.....	14	873
Paint, Distemper	G. J. Stevens	200,228	Feb. 12, 1878	344	.....	13	294
Paint-mill	W. R. Axe	209,792	Nov. 12, 1878	287	85	14	723
Paint-mills, Grinding-stones for	R. Byrne	201,990	Apr. 2, 1878	127	37	13	617
Painting barrels, Machine for	M. L. Deering	199,623	Jan. 29, 1878	967	281	13	183
Painting broom-handles, Machine for	H. Bradt and N. Van Slyk	201,866	Apr. 2, 1878	8	2, 3	13	600
Painting canvas, Machine for	W. Levin	203,843	May 21, 1878	661	188	13	923
Painting-machine	C. T. Brandon	201,322	Mar. 19, 1878	532	163	13	507
Painting-machine for flat surfaces	J. Warner	203,353	May 7, 1878	165	48	13	843
Painting wire-cloth, Apparatus for	M. Kennedy	204,981	June 18, 1878	605	177	13	1090
Palmetto-leaves, &c., Machine for treating	G. F. Miller and W. G. Benedict	201,269	Mar. 12, 1878	457	141	13	490
Pan:							
See Bake-pan.	Frying-pan.						
Baking-pan.	Patty-pan.						
Dust-pan.	Sheet-metal pan.						
Evaporating-pan.							
Paneling-machine	H. J. Cordesman, jr	199,268	Jan. 15, 1878	572	167	13	105
Pantaloon	J. W. Davis	199,273	Jan. 15, 1878	576	168	13	105
Pantaloon-protector	W. H. Ewing	209,162	Oct. 22, 1878	796	231	14	611
Paper and other fabrics, Machine for feeding, pasting, and cutting	G. L. Jaeger	200,307	Feb. 12, 1878	423	126	13	306
Paper and other fabrics, Marbleizing	G. Grossheim	204,146	May 28, 1878	1005	286	13	970
Paper and paper-pulp, Manufacture of	W. E. Farrell	208,518	Oct. 1, 1878	63	.....	14	497
Paper, Asbestos sheathing	S. C. Halpine	200,192	Feb. 12, 1878	310	92	13	289
Paper bag	N. J. Alexander	205,028	June 18, 1878	650	192	13	1105
Paper bag	J. Arkell	204,780	June 11, 1878	375	112	13	1066
Paper bag	J. Arkell	209,315	Oct. 29, 1878	953	279	14	637
Paper bag	J. Arkell	209,316	Oct. 29, 1878	955	279	14	637
Paper bag	J. Arkell	209,538	Oct. 29, 1878	1193	346	14	670
Paper bag	J. B. Davenport	205,840	July 9, 1878	422	129	14	66
Paper bag	O. E. Davidson	201,755	Mar. 26, 1878	979	299	13	575
Paper bag	S. L. Chapman	202,230	Apr. 9, 1878	395	116	13	659
Paper-bag holder	O. A. Allison	207,702	Sept. 3, 1878	116	36, 37	14	364
Paper-bag machine	O. E. Davidson	201,754	Mar. 26, 1878	978	299	13	575
Paper-bag machine	A. B. Glover	200,654	Feb. 26, 1878	803	236 237	13	380
Paper-bag machine	R. W. and M. Murphy	201,277	Mar. 12, 1878	463	143	13	491
Paper-bag machine	R. W. and M. Murphy	201,278	Mar. 12, 1878	465	143	13	491
Paper-bag machine	F. E. Porter	205,133	June 18, 1878	749	223 224 224	13	1118
Paper bags, Machinery for making satchel-bottom	C. B. Stilwell	206,638	July 30, 1878	1337	385 386	14	193
Paper bags, Manufacture of	J. P. Raymond	201,832	Mar. 26, 1878	1060	323	13	587
Paper barrel	J. L. Thomson and J. Naylor, jr.	202,890	Apr. 23, 1878	1128	324	13	766
Paper basket	R. B. Crane	202,999	Apr. 30, 1878	1245	360	13	785
Paper baskets, Making seamless	R. B. Crane	203,000	Apr. 30, 1878	1246	360	13	785
Paper board, Machinery for making	C. Whealen and L. Kuerr, jr	203,684	May 14, 1878	480	136 137	13	893
Paper board, Manufacture of	J. F. Sheeder	210,714	Dec. 10, 1878	357	98	14	878
Paper, Book of carbon	J. S. McDonald	200,145	Feb. 12, 1878	263	79	13	282
Paper box	C. M. Arthur	205,693	July 2, 1878	142	44	14	27
Paper box	J. P. Buckingham and O. M. Hamilton	210,913	Dec. 17, 1878	599	166	14	918
Paper box	G. A. Dunn	203,899	May 21, 1878	719	206	13	931
Paper box	H. A. Mann, jr	207,813	Sept. 10, 1878	244	76	14	383
Paper box	W. Meschenmoser	208,412	Sept. 24, 1878	904	265	14	476
Paper box	J. G. Schermerhorn	201,707	Mar. 26, 1878	931	285	13	568
Paper box	J. G. Schermerhorn	206,831	Aug. 6, 1878	176	56	14	228
Paper box	C. F. Taylor	210,576	Dec. 3, 1878	207	54	14	850
Paper box for packing hatchets	J. W. Sprowles	200,063	Feb. 5, 1878	108	36	13	250
Paper boxes from pulp, Machine for the manufacture of	W. J. Keefe	202,352	Apr. 16, 1878	540	158	13	683
Paper-calendering rollers, Adjustable box for	J. W. Bicknell	209,954	Nov. 19, 1878	466	141	14	751
Paper card-baskets, Making	R. W. Betts	207,239	Aug. 20, 1878	616	185	14	290
Paper chair seat and back	N. Harwood	204,667	June 11, 1878	251	78	13	1051
Paper collar	S. Bates	200,685	Feb. 26, 1878	837	246	13	385
Paper collar	J. H. Hoffman and C. Spofford	200,298	Feb. 12, 1878	416	124	13	305
Paper-collar machine	C. Spofford	209,628	Nov. 5, 1878	100	29, 30	14	694
Paper cutting and rolling machine	E. Dangoise	209,868	Nov. 12, 1878	366	109	14	743
Paper cutting and winding machine	I. Frank	207,411	Aug. 27, 1878	807	239	14	320
Paper-cutting machine	G. R. Clarke	199,146	Jan. 15, 1878	452	133	13	86
Paper-cutting machine	L. P. Cohen	205,527	July 2, 1878	66	19	14	17
Paper-cutting machine	T. S. Greenman	203,441	May 7, 1878	220	62	13	350

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Paper-cutting machine .....	W. T. Shaffer .....	207, 212	Aug. 20, 1878	588	176	14	287
Paper-cutting machine .....	G. A. Walker .....	209, 995	Nov. 19, 1878	510	154	14	756
Paper-cutting machines, Expanding drum for .....	W. E. Hudson .....	203, 833	May 21, 1878	650	185	13	921
Paper-cutting machines, Gage for .....	C. Cranston .....	206, 230	July 23, 1878	872	240	14	131
Paper-damping implement .....	D. L. Mulford .....	209, 183	Oct. 22, 1878	821	237	14	614
Paper dish .....	P. M. Aulabaugh .....	206, 412	July 30, 1878	1102	315	14	164
Paper dish .....	T. Donahue .....	205, 531	July 2, 1878	71	21	14	18
Paper dish .....	H. A. House .....	208, 096	Sept. 17, 1878	553	166	14	428
Paper dish .....	H. L. R. Wolf .....	199, 675	Jan. 29, 1878	1021	297	13	191
Paper dishes, Apparatus for molding .....	H. A. House .....	208, 097	Sept. 17, 1878	553	166	14	428
Paper-fastener .....	F. J. Lippitt .....	210, 132	Nov. 19, 1878	658	195	14	776
Paper-fastener .....	E. A. G. Roulstone .....	209, 516	Oct. 29, 1878	1107	359	14	667
Paper-fastener .....	E. W. Van Benschoten .....	210, 885	Dec. 17, 1878	558	156	14	913
Paper-fastener, Metallic .....	G. W. McGill .....	208, 836	Oct. 8, 1878	413	119	14	552
Paper-fasteners, Machine for attaching .....	C. W. Blake .....	207, 157	Aug. 20, 1878	529	159	14	279
Paper-feeding apparatus .....	F. H. Lauten .....	208, 980	Oct. 15, 1878	577	168	14	577
Paper-feeding machine .....	L. Harlow .....	207, 805	Sept. 10, 1878	235	74	14	382
Paper, felt, and other fabrics, Machine for finishing .....	W. Scranton .....	204, 100	May 21, 1878	935	267	13	958
Paper folding and counting machine .....	N. S. Clement .....	199, 354	Jan. 22, 1878	667	{ 195 196 115 116 }	13	128
Paper-folding machine .....	G. Lauder .....	208, 881	Oct. 8, 1878	401	{ 115 116 }	14	550
Paper-folding machine .....	G. Lauder .....	210, 544	Dec. 3, 1878	107	44	14	845
Paper-folding machine .....	E. Nordblom and L. Hansen .....	200, 838	Mar. 5, 1878	25	8, 9	13	418
Paper-folding machine .....	W. Spalckhaver .....	204, 772	June 11, 1878	361	{ 108 109 110 }	13	1065
Paper for bank-notes, bonds, checks, &c., Manufacture of .....	G. W. Casilear .....	210, 497	Dec. 3, 1878	111	135	13	838
Paper for paper bags and apparatus for making the same .....	T. Phillips .....	200, 337	Feb. 12, 1878	458	135	13	311
Paper holder, Wrapping .....	W. H. Douty .....	210, 679	Dec. 10, 1878	325	89	14	875
Paper, Machine for making wood-pulp for .....	R. D. Mossman .....	202, 185	Apr. 9, 1878	353	103	13	653
Paper, &c., Machine for pasting together and drying rolls or continuous sheets of .....	J. Callier .....	203, 886	May 21, 1878	702	201	13	928
Paper, Machine for reducing wood to pulp for .....	W. J. Baxendale and D. Barry .....	201, 486	Mar. 19, 1878	695	212	13	530
Paper, Machine for reducing wood to pulp for .....	W. H. Haskins .....	198, 845	Jan. 1, 1878	123	35	13	28
Paper, Machine for reducing wood to pulp for .....	J. G. Moore .....	201, 550	Mar. 19, 1878	762	232	13	539
Paper-machinery, Pulp-screen for .....	S. L. Gould .....	210, 521	Dec. 3, 1878	141	37	14	842
Paper-machines, Doctor for .....	G. F. Jones .....	200, 309	Feb. 12, 1878	426	127	13	367
Paper-machines, Felt-stretcher for .....	O. W. Clark .....	210, 097	Nov. 12, 1878	622	185	14	771
Paper-machines, Wire-guide for .....	J. A. White .....	200, 367	Feb. 12, 1878	492	144	13	316
Paper making and other machines, Roller for .....	F. A. B. Koons .....	207, 287	Aug. 20, 1878	667	198	14	297
Paper-making, Device for cleaning rope for .....	W. H. Downing and O. W. Chamberlain .....	202, 008	Apr. 2, 1878	144	42	13	629
Paper-making machine .....	J. W. Dixon .....	201, 757	Mar. 26, 1878	981	300	13	576
Paper-making machine .....	J. Hatch .....	206, 107	July 16, 1878	712	205	14	108
Paper-making machine, Cylinder .....	J. Hatch .....	206, 106	July 16, 1878	709	205	14	107
Paper-making machines, Felt-washer for .....	G. W. Lewthwaite .....	200, 209	Feb. 12, 1878	324	97	13	291
Paper-making machines, Roll suction-box for .....	C. Young .....	209, 003	Oct. 15, 1878	601	175	14	560
Paper-making machines, Suction-box for .....	C. Young .....	200, 369	Feb. 12, 1878	494	145	13	317
Paper-making, &c., Preparing gypsum for use in .....	C. T. Tomkins .....	211, 086	Dec. 17, 1878	782	215	14	949
Paper, Manufacture of flanged articles of .....	H. A. House .....	209, 686	Nov. 5, 1878	163	48	14	703
Paper, Manufacture of ornamental .....	J. F. Marsh .....	203, 474	May 7, 1878	251	72	13	855
Paper or cloth, Finishing the surface of .....	C. E. Sawyer .....	204, 698	May 21, 1878	933	13	13	867
Paper, Ornamental .....	W. E. Symes .....	202, 483	Apr. 16, 1878	605	195	13	761
Paper or rug engines, Bed-plate for .....	A. A. Simonds .....	199, 040	Feb. 5, 1878	53	17	13	241
Paper panel to imitate wood .....	C. Hansen .....	199, 435	Jan. 22, 1878	745	13	13	140
Paper-perforating machine .....	E. W. Blackhall .....	209, 448	Oct. 29, 1878	1093	818	14	656
Paper pillow-sham .....	S. A. Weed .....	199, 881	Jan. 29, 1878	1211	355	13	229
Paper pocket for cigars .....	O. L. Parmenter .....	205, 897	July 9, 1878	481	137	14	73
Paper, Preservative wrapping and packing .....	J. F. Rodgers .....	208, 853	Oct. 8, 1878	431	14	14	554
Paper-pulp, Apparatus for washing .....	J. W. Hyatt and J. G. Jarvis .....	210, 612	Dec. 10, 1878	255	70	14	866
Paper-pulp, Cooling beating-engines for .....	C. L. Hamilton .....	200, 828	Mar. 5, 1878	14	5	13	417
Paper-pulp distributor for coating articles .....	I. Jennings .....	198, 887	Jan. 1, 1878	160	48	13	34
Paper-pulp engines, Bed plate for .....	J. H. Horne .....	210, 937	Dec. 17, 1878	623	173	14	921
Paper-pulp engines, Emptying-valve for .....	J. Carroll .....	208, 292	Sept. 24, 1878	784	229	14	469
Paper-pulp from salt-water fibrous plants, Manufacture of .....	W. E. Farrell .....	199, 427	Jan. 22, 1878	737	13	13	139
Paper-pulp from wood, Machine for making .....	R. F. Barker .....	202, 216	Apr. 9, 1878	380	111	13	637
Paper-pulp from wood, Machine for making .....	W. A. Doane .....	202, 097	Apr. 9, 1878	255	75	13	649
Paper-pulp from wood, Manufacture of .....	S. M. Allen .....	201, 083	Mar. 12, 1878	266	83	13	463
Paper-pulp from wood, Manufacture of .....	H. M. Carpenter .....	210, 914	Dec. 17, 1878	600	14	14	918
Paper-pulp from wood, Manufacture of .....	J. Taylor .....	207, 568	Aug. 27, 1878	977	287	14	341
Paper-pulp from wood, Rotary grinding-machine for the manufacture of .....	W. R. Patrick .....	204, 577	May 21, 1878	909	260	13	855
Paper-pulp, Machine for making pails from .....	M. E. Hubbard .....	202, 547	Apr. 16, 1878	749	216	13	710
Paper-pulp, Machine for preparing wood fiber for .....	J. C. McIntyre .....	203, 928	May 21, 1878	748	216	13	855
Paper-pulp, Machine for preparing wood for making .....	W. W. D. Jeffers .....	200, 540	Feb. 19, 1878	665	196	13	351
Paper-pulp, Machine for reducing wood to .....	N. Bly .....	201, 152	Mar. 12, 1878	338	104	13	473
Paper-pulp, Machine for reducing wood to .....	W. N. Cornell and C. Tollner .....	208, 890	Oct. 15, 1878	480	138	14	564
Paper-pulp, Machine for separating the fibers of wood for .....	P. and G. C. Rose .....	206, 971	Aug. 13, 1878	332	101	14	251
Paper-pulp, Manufacture of barrel-heads, &c., from .....	G. W. Laraway .....	206, 396	July 30, 1878	1084	{ 310 311 }	14	162
Paper-pulp, Mechanism for pressing and finishing hollow articles of .....	W. J. Keefe .....	202, 353	Apr. 16, 1878	542	158	13	683
Paper-pulp, Obtaining fiber from wood for .....	W. R. Patrick .....	200, 085	Feb. 5, 1878	197	13	13	264
Paper-pulp pail .....	E. Hubbard .....	204, 223	May 28, 1878	1089	211	13	961
Paper-pulp screen or dresser .....	E. Mather .....	206, 187	July 23, 1878	821	234	14	125
Paper-pulp, Separating and cleaning vegetable fiber for .....	C. Langa .....	210, 339	Nov. 26, 1878	895	262	14	811
Paper pulp, Treating wood to imitate manila .....	G. E. Marshall .....	207, 428	Aug. 27, 1878	824	14	14	322
Paper-pulp washer .....	H. Hollingsworth .....	206, 877	Aug. 13, 1878	241	76	14	346
Paper-pulp washer .....	H. Hollingsworth .....	210, 853	Dec. 17, 1878	515	146	14	908

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Paper-pulp, Wood-grinding machine for .....	W. D. and N. H. Shaw .....	200, 197	Oct. 22, 1878	833	241	14	616
Paper, &c., Reducing wood to pulp for .....	B. F. Brown .....	205, 347	June 25, 1878	998	295	13	1156
Paper, Reducing wood to pulp for .....	A. H. Fisher .....	203, 437	May 7, 1878	214	.....	13	849
Paper, Roofing .....	J. H. Greene .....	206, 436	July 30, 1878	1127	323	14	167
Paper shutter for windows .....	W. Hipkins .....	199, 291	Jan. 15, 1878	593	173	13	108
Paper-stock and fertilizers, Treating rags for obtaining .....	H. Wiesinger and L. Rissmüller .....	206, 158	July 16, 1878	775	.....	14	115
Paper-stock and for other purposes, Perforated tile for draining .....	S. Snell .....	206, 632	July 30, 1878	1330	382	14	192
Paper-stock, Machine for separating the fibers of wood for .....	P. and G. C. Rose .....	207, 553	Aug. 27, 1878	961	282	14	339
Paper-stock, Rotary boiler for boiling and steaming .....	J. Thorpe .....	206, 277	July 23, 1878	927	262	14	1391
Paper to render it incombustible, Treating .....	O. Mayo .....	199, 656	Jan. 29, 1878	1002	.....	13	188
Paper to take copies, Preparing .....	F. Hawke .....	210, 690	Dec. 10, 1878	335	.....	14	876
Paper-tube machine .....	A. G. Batchelder .....	209, 746	Nov. 12, 1878	239	71	14	717
Paper-tube machine .....	C. B. Stilwell .....	206, 637	July 30, 1878	1334	383	14	193
Paper vessels, &c., Die for pressing .....	J. Stevens .....	203, 670	May 14, 1878	468	133	13	891
Paper, Waxing .....	S. Hammerschlag .....	209, 393	Oct. 29, 1878	1036	301	14	648
Paper-weight and copy-holder combined .....	D. Zimmer .....	203, 866	May 21, 1878	683	194	13	926
Paper-winding shaft .....	T. S. Scott .....	211, 059	Dec. 17, 1878	776	212	14	939
Parcels, Apparatus for conveying small .....	A. Liasse .....	208, 405	Sept. 24, 1878	895	262	14	475
Parer, Apple .....	D. H. Goodell and W. Robb .....	200, 279	Feb. 12, 1878	396	117	13	302
Parer, Peach .....	W. S. Plummer .....	208, 988	Oct. 15, 1878	584	170	14	578
Paring-knife .....	J. H. Wilhelm .....	203, 862	May 21, 1878	681	193	13	925
Paring machine, Apple .....	W. H. Goodchild and S. F. Hay .....	199, 903	Feb. 5, 1878	13	4	13	235
Parlor-fountain .....	F. Buchhorn .....	200, 126	Feb. 12, 1878	245	74	13	280
Parlor-fountain .....	H. Wagner .....	205, 928	July 9, 1878	517	147	14	78
Parquetry, Clamp for gluing .....	S. P. Grocock .....	206, 733	July 23, 1878	874	249	14	132
Passenger-register .....	J. W. Fowler and D. F. Lewis .....	206, 553	July 30, 1878	1247	359	14	182
Passenger-register .....	J. W. Fowler and D. F. Lewis .....	207, 728	Sept. 3, 1878	146	44	14	368
Passenger-register, Platform .....	S. Hastings .....	201, 009	Mar. 5, 1878	186	60	13	444
Passenger step-register .....	C. Martens and F. Krupp .....	210, 264	Nov. 26, 1878	811	240	14	890
Pattern: See Embroidery-pattern.							
Pattern for garments, Adjustable .....	U. L. Webster .....	200, 234	Feb. 12, 1878	347	104	13	295
Pattern-marked fabric for garments .....	W. C. Lawson .....	206, 584	July 30, 1878	1285	369	14	187
Patterns, Apparatus for grading .....	D. F. Hartford .....	201, 111	Mar. 12, 1878	294	91	13	467
Patterns, Tool for cutting out .....	D. F. Hartford .....	207, 866	Sept. 10, 1878	305	93	14	391
Patty-pan .....	S. J. Frost and H. T. Smith .....	202, 939	Apr. 30, 1878	1189	343	13	777
Pavement .....	J. H. McMurray and S. E. Gross .....	206, 812	Aug. 6, 1878	157	50	14	226
Pavement, Composition .....	J. P. Cranford .....	210, 101	Nov. 12, 1878	627	186	14	772
Pavement, Composition .....	J. C. Russell .....	204, 763	June 11, 1878	351	.....	13	1064
Pavement, Concrete .....	A. B. Dean .....	206, 426	July 30, 1878	1118	320	14	166
Pavement, Street .....	I. Merchand .....	199, 562	Jan. 22, 1878	874	256	13	161
Pavement, Street .....	J. A. Seaman .....	199, 110	Jan. 8, 1878	395	118	13	78
Pavement, Street .....	W. H. and H. M. Stow .....	200, 105	Feb. 5, 1878	215	67	13	266
Pavement, Wood .....	H. Akerhielm .....	204, 414	June 4, 1878	1	1	13	1013
Pavement, Wood .....	W. H. Stow .....	208, 436	Sept. 24, 1878	933	273	14	479
Pavements, Composition for .....	E. S. Bradford .....	200, 123	Feb. 12, 1878	242	.....	13	279
Paving and other purposes, Plastic compound for .....	J. S. Morel and D. R. Fletcher .....	201, 274	Mar. 12, 1878	461	.....	13	491
Pawl and ratchet .....	L. A. Grosclaude .....	210, 251	Nov. 26, 1878	798	236	14	799
Pawl and ratchet device .....	J. D. Wright .....	203, 519	May 7, 1878	295	84	13	861
Pea and bean huller .....	J. M. Turner .....	210, 727	Dec. 10, 1878	374	102	14	880
Peanut-cleaner .....	B. H. Vellines .....	209, 730	Nov. 5, 1878	209	62	14	709
Peanut-roaster .....	G. B. Hall .....	207, 414	Aug. 27, 1878	812	240	14	320
Peanut-warmer .....	F. A. Bowdoin .....	204, 190	May 28, 1878	1050	301	13	977
Pecch-surfaces .....	J. H. Smith .....	203, 085	Apr. 30, 1878	1330	386	13	796
Pearl cutters, Producing imitation .....	F. Tachfarber .....	198, 758	Jan. 1, 1878	35	.....	13	13
Peat bricks, Apparatus for the manufacture of .....	F. Hack .....	204, 816	June 11, 1878	412	121	13	1071
Pedometer .....	B. S. Church .....	210, 096	Nov. 19, 1878	620	184	14	771
Peg blanks, Machine for making shoe .....	A. C. Gallahue .....	203, 131	Apr. 30, 1878	1374	400	13	802
Peg-cutter .....	C. A. Corman .....	200, 788	Feb. 26, 1878	935	275	13	400
Peg-float .....	J. W. Fifield .....	199, 049	Jan. 8, 1878	337	99	12	68
Peg-float .....	A. Simcox .....	206, 690	Aug. 6, 1878	37	10	14	211
Peg-float .....	A. Whittemore .....	207, 925	Sept. 10, 1878	368	112	14	399
Peg-float .....	A. Whittemore .....	209, 784	Nov. 12, 1878	276	82	14	722
Peg for stringed instruments .....	A. Stuttaford .....	207, 566	Aug. 27, 1878	976	286	14	341
Pegging-machine .....	T. H. Fletcher .....	206, 717	Aug. 6, 1878	60	19	20	214
Pegging-machine .....	O. Huff .....	206, 178	July 23, 1878	813	232	14	124
Pen .....	W. M. Prince .....	202, 465	Apr. 16, 1878	651	190	13	689
Pen and pencil clasp .....	G. C. Rickly .....	209, 776	Nov. 12, 1878	269	80	14	721
Pen and pencil holders, Weighing attachment for .....	C. C. Redmond .....	205, 575	July 2, 1878	120	35	14	24
Pen, Drawing .....	R. L. Walter .....	200, 588	Feb. 19, 1878	714	210	13	359
Pen, Fountain .....	G. B. Adams .....	208, 219	Sept. 24, 1878	701	207	14	451
Pen, Fountain .....	J. Ayers .....	209, 791	Nov. 12, 1878	286	85	14	723
Pen, Fountain .....	A. T. Cross .....	199, 621	Jan. 29, 1878	965	280	13	183
Pen, Fountain .....	A. T. Cross .....	209, 959	Nov. 19, 1878	472	142	14	751
Pen, Fountain .....	J. G. Cross .....	210, 404	Dec. 3, 1878	14	5	14	826
Pen, Fountain .....	D. L. Dieckmann and F. Burgau .....	207, 399	Aug. 27, 1878	793	236	14	318
Pen, Fountain .....	I. W. Heysinger .....	206, 786	Aug. 6, 1878	135	42	14	223
Pen, Fountain .....	T. H. and J. E. Quinn .....	204, 371	May 28, 1878	1239	353	13	1090
Pen, Fountain .....	W. Sachs .....	209, 716	Nov. 5, 1878	194	57	14	707
Pen, Fountain .....	J. W. Stanton .....	204, 857	June 11, 1878	455	133	13	1676
Pen, Fountain .....	W. W. Stewart .....	207, 318	Aug. 20, 1878	695	207	14	391
Pen, Fountain .....	C. Stockmann .....	205, 437	June 25, 1878	1685	321	13	1167
Pen-holder .....	G. R. Bickers .....	201, 985	Apr. 2, 1878	122	36	13	617
Pen-holder .....	J. Hoffman .....	204, 041	May 21, 1878	872	250	13	950
Pen holder .....	J. Hoffman and C. W. Boman .....	200, 061	Feb. 5, 1878	171	55	13	260
Pen-holder .....	T. B. Jeffery .....	206, 950	Aug. 13, 1878	314	96	14	249
Pen-holder .....	J. F. Johnson .....	203, 460	May 7, 1878	238	68	13	853
Pen holder, Fountain .....	W. W. Stewart .....	206, 200	July 23, 1878	841	240	14	127
Pen-holders, Ruling attachment for .....	J. Hoffman .....	210, 256	Nov. 26, 1878	802	238	14	799
Pen, Marking .....	J. Schneider .....	199, 471	Jan. 22, 1878	779	29	13	146
Pen, Multiple .....	F. Soennecken .....	209, 732	Nov. 5, 1878	201	60	14	708
Pen, Perforating .....	T. A. Edison .....	203, 329	May 7, 1878	90	28	13	135

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Pen, Pneumatic stencil.....	T. A. Edison.....	205,370	June 25, 1878	1022	302	13	1158
Pen point, Fountain.....	J. Holland.....	202,655	Apr. 23, 1878	881	252	13	735
Pen, Puncturing.....	J. M. Griest.....	208,905	Oct. 15, 1878	496	143	14	566
Pen, Ruling.....	J. C. Moss.....	200,328	Feb. 12, 1878	450	133	13	316
Pen, Soluble-ink.....	J. Perkins.....	198,812	Jan. 1, 1878	93	26	13	22
Pens, Attachment for stenciling.....	F. P. Woodbury.....	202,913	Apr. 23, 1878	1150	330	13	768
Pens, Support for stencil.....	H. Van Hoevenbergh and W. K. Applebaugh.....	203,390	May 7, 1878	163	47	13	843
Pencil.....	E. C. Haviland.....	205,797	July 9, 1878	376	108	14	60
Pencil.....	J. Holland.....	202,654	Apr. 23, 1878	880	252	13	734
Pencil, Artificial slate.....	R. Lanstrom.....	203,549	May 14, 1878	353	.....	13	877
Pencil-clasp.....	A. Christey.....	208,464	Oct. 1, 1878	12	3	14	496
Pencil-clasp.....	W. A. Scollay.....	208,639	Oct. 1, 1878	187	54	14	514
Pencil, Drafting.....	F. W. McGee.....	207,883	Sept. 10, 1878	322	98	14	393
Pencil-holder.....	C. W. Boman.....	209,449	Oct. 29, 1878	1095	318	14	657
Pencil-holder.....	S. Hill.....	201,672	Mar. 26, 1878	899	274	13	563
Pencil holder, Lead.....	O. Cleveland.....	208,154	Sept. 17, 1878	619	183	14	437
Pencil-sharpener.....	H. G. Downs.....	207,402	Aug. 27, 1878	795	236	14	319
Pencil-sharpener.....	W. H. Keyes.....	199,448	Jan. 22, 1878	756	222	13	142
Pencil-sharpener.....	E. D. Miller.....	202,183	Apr. 9, 1878	350	103	13	652
Pencil-sharpener.....	A. P. St. John.....	202,070	Apr. 2, 1878	210	61	13	628
Pencil-sharpener and eraser combined.....	W. Sellers.....	204,169	May 28, 1878	1029	293	13	973
Pencil-sharpener device.....	W. Haskell.....	206,174	July 23, 1878	810	231	14	123
Pencil-sharpener machine.....	F. Livingston.....	203,550	May 14, 1878	353	100	13	877
Pencils, Adding-register for.....	C. C. Fields.....	198,934	Jan. 8, 1878	225	63	13	50
Pendulum.....	F. A. Lane.....	207,609	Sept. 3, 1878	25	9	14	352
Pendulum-regulator, Automatic.....	F. J. Martins.....	208,620	Oct. 1, 1878	163	48	14	511
Pendulums, Electric gravity-escapement for.....	J. F. Pratt.....	205,808	July 9, 1878	390	112	14	62
Pepper-mill and caster, Combined.....	P. Chalas.....	210,837	Dec. 17, 1878	494	{ 139 140 }	14	909
Percussion-primer.....	J. Gardner.....	208,589	Oct. 1, 1878	136	39	14	507
Perforating-machine.....	R. W. Mackall.....	200,142	Feb. 12, 1878	261	78	13	282
Permutation-lock.....	A. Heilbrun.....	207,854	Aug. 27, 1878	749	224	14	313
Permutation-lock.....	S. A. Mann.....	207,613	Sept. 3, 1878	29	10	14	353
Permutation-lock.....	W. H. G. Savage.....	210,056	Nov. 19, 1878	575	172	14	765
Permutation-lock.....	J. T. Speer.....	205,586	July 2, 1878	128	38	14	25
Permutation-lock.....	B. F. Stewart.....	203,299	May 7, 1878	68	21	13	829
Permutation-lock.....	W. G. Van Buskirk and G. Hay.....	202,970	Apr. 30, 1878	1221	353	13	782
Permutation-lock.....	G. W. Youmans.....	201,375	Mar. 19, 1878	585	180	13	515
Permutation-locks, Tumbler for.....	J. Loch.....	200,070	Feb. 5, 1878	179	57	13	261
Pessary.....	J. W. Dawson.....	205,363	June 25, 1878	1015	300	13	1156
Pessary.....	R. Lockwood.....	202,037	Apr. 2, 1878	179	52	13	624
Pessary, Medicated.....	T. N. Berlin.....	208,883	Oct. 15, 1878	470	135	14	565
Petroleum into oils of different grades and fire-tests, Apparatus for separating refined.....	D. Rogers.....	211,955	Dec. 17, 1878	769	211	14	956
Petroleum, Iron tank for holding.....	E. E. Hendrick.....	210,324	Nov. 26, 1878	877	258	14	809
Petroleum-oil, Transporting.....	R. A. Wilder.....	206,990	Aug. 13, 1878	350	108	14	233
Petroleum-oil, Transporting.....	R. A. Wilder.....	207,231	Aug. 20, 1878	608	183	14	289
Petroleum, Storing-tank for.....	F. K. Plumbly.....	203,557	May 14, 1878	360	102	13	878
Petroleum-tanks, Man-hole cover for.....	W. H. Brock.....	203,816	May 21, 1878	635	179	13	919
Phonograph or speaking machine.....	T. A. Edison.....	200,521	Feb. 19, 1878	646	191	13	848
Photograph-frame.....	A. Griffin.....	200,713	Feb. 26, 1878	868	255	13	389
Photographic camera.....	A. L. Hudson.....	201,248	Mar. 12, 1878	434	133	13	486
Photographic camera.....	I. H. Stoddard.....	208,345	Sept. 24, 1878	839	244	14	467
Photographic negative.....	G. Hoeffe and A. Homeier.....	203,484	July 2, 1878	21	.....	14	11
Photographic negatives, Preparation of.....	G. W. Stigleman.....	201,065	Mar. 5, 1878	243	77	13	453
Photographic pictures, Coloring.....	D. F. Frink.....	209,880	Nov. 12, 1878	376	.....	14	735
Photographic pictures, Developing.....	H. Rundle.....	204,700	June 11, 1878	349	.....	13	1064
Photographic-plate holder.....	R. F. Baltzly.....	199,491	Jan. 22, 1878	798	234	13	149
Photographic-printing frame.....	W. H. Laird.....	207,358	Aug. 27, 1878	754	225	14	313
Photographic-printing frame.....	G. F. E. Pearsall.....	208,536	Oct. 1, 1878	81	24	14	569
Photographic-printing frame.....	E. M. Seitz.....	203,146	June 18, 1878	773	228	13	1121
Photographic studio.....	E. C. Thompson.....	210,645	Dec. 10, 1878	290	80	14	870
Photographic vignetizing device.....	F. H. Price and A. S. Campbell.....	199,406	Jan. 22, 1878	774	227	13	145
Photographs, Coloring.....	S. M. H. Pennington.....	205,807	July 9, 1878	389	.....	14	62
Photographs, Coloring.....	W. V. Price and J. G. Klingaman.....	206,968	Aug. 13, 1878	330	.....	14	251
Piano.....	G. Caddick.....	202,408	Apr. 16, 1878	593	174	13	691
Piano-action.....	J. Schwander and J. Hersburger.....	210,638	Dec. 10, 1878	282	77	14	808
Piano-action.....	W. T. Waite.....	201,852	Mar. 26, 1878	1079	328	13	589
Piano-action, Electro-magnetic.....	M. Delaney.....	202,096	Apr. 9, 1878	253	74	13	639
Piano-action, Upright.....	A. H. Hastings.....	199,154	Jan. 15, 1878	460	136	13	87
Piano-action, Upright.....	G. W. Neill.....	208,328	Sept. 24, 1878	820	240	14	465
Piano-action, Upright.....	C. E. and A. F. Rogers.....	199,314	Jan. 15, 1878	617	{ 179 180 }	13	112
Pianos and organs, Shelf attachment for.....	J. H. Gibson.....	205,856	July 9, 1878	437	124	14	68
Pianos and organs, Transposition key-board for.....	E. K. Milliken.....	206,345	July 23, 1878	1011	{ 288 289 }	14	149
Piano case and frame.....	G. Woods.....	200,850	Mar. 5, 1878	37	13	13	420
Piano-forte.....	E. Gabler.....	199,635	Jan. 29, 1878	981	285	13	185
Piano-forte.....	J. R. Lomas.....	210,043	Nov. 19, 1878	562	168	14	703
Piano-forte.....	C. H. L. Plasse.....	210,223	Nov. 26, 1878	770	228	14	795
Piano-forte.....	C. F. T. Steinway.....	204,108	May 21, 1878	943	270	12	959
Piano-forte action.....	F. St. Amant.....	201,461	Mar. 19, 1878	671	205	13	527
Piano-forte action.....	G. Bothner.....	203,407	May 7, 1878	177	51	13	845
Piano-forte action.....	J. Brinsmead.....	199,687	Jan. 29, 1878	1033	{ 300 301 }	13	193
Piano-forte action.....	G. W. Neill.....	204,752	June 11, 1878	341	103	13	1063
Piano-forte action.....	C. F. T. Steinway.....	204,107	May 21, 1878	942	{ 269 270 }	13	959
Piano-forte action, Upright.....	C. F. Chew.....	207,946	Sept. 10, 1878	391	118	14	401
Piano-forte agraffe.....	C. F. T. Steinway.....	204,109	May 21, 1878	944	270	13	959
Piano-forte damper-action.....	O. Wessell, A. Mickel, and K. Gross.....	210,381	Nov. 26, 1878	947	275	14	817
Piano-forte frame, Upright.....	C. F. Chew.....	207,947	Sept. 10, 1878	392	118	14	401
Piano-forte, Grand.....	C. F. T. Steinway.....	204,106	May 21, 1878	941	269	13	958



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Piano-forte pedal .....	A. A. Rhentan .....	209,775	Nov. 12, 1878	268	80	14	721
Piano-forte repeating-action .....	C. F. T. Steinway .....	205,696	July 2, 1878	250	74, 75	14	40
Piano-forte sound-board .....	G. W. Lyon .....	200,741	Feb. 26, 1878	894	263	13	393
Piano-forte sounding-board .....	C. F. T. Steinway .....	204,110	May 21, 1878	945	270	13	959
Piano-forte string .....	E. J. Watson and P. Bauer .....	210,172	Nov. 19, 1878	700	208	14	782
Piano-forte tuning attachment .....	H. F. Jacobs .....	204,152	May 28, 1878	1012	287	13	971
Piano-fortes, Capodastro-frame for .....	C. F. T. Steinway .....	204,111	May 21, 1878	946	271	13	959
Piano-fortes, Hand-guide for .....	M. Sudderick .....	204,260	May 28, 1878	1126	321	13	986
Piano-hammer .....	A. O. Hall .....	199,537	Jan. 22, 1878	853	249	13	157
Piano-key .....	J. W. Hyatt .....	210,780	Dec. 10, 1878	428	119	14	888
Piano pedal attachment .....	L. Mathias .....	198,893	Jan. 1, 1878	174	50	13	36
Piano-string .....	H. W. Gray .....	202,020	Apr. 2, 1878	157	46	13	622
Piano-stringing device .....	S. Mennig .....	204,908	June 18, 1878	532	155	13	1089
Piano-tuning pin .....	J. Lautenschlager .....	200,207	Feb. 12, 1878	323	97	13	291
Pianos, Stringing .....	B. Dreher .....	206,232	July 23, 1878	874	249	14	132
Picker:							
See Cotton-picker. Fruit-picker.							
Cranberry-picker. Loom-picker.							
Picket-pin .....	P. J. Twced .....	200,489	Feb. 19, 1878	616	182	13	344
Pickle-can .....	E. H. Foote .....	206,310	July 23, 1878	966	275	14	143
Pickle-fork .....	S. Poole .....	206,482	July 30, 1878	1177	337	14	173
Picks, &c., Manufacture of .....	J. Besler .....	204,417	June 4, 1878	4	1, 2	13	1013
Picture-exhibitor .....	J. C. Koch .....	200,460	Feb. 19, 1878	589	173	13	339
Picture-frame .....	A. S. Davis .....	205,250	June 25, 1878	891	264	13	1142
Picture-frame .....	A. W. Hale .....	208,681	Oct. 8, 1878	241	69	14	529
Picture-frame .....	A. Komp .....	207,532	Aug. 27, 1878	939	276	14	336
Picture-frame .....	A. Komp .....	209,900	Nov. 12, 1878	394	117	14	738
Picture-frame .....	H. Pattberg .....	200,832	Nov. 12, 1878	327	97	14	728
Picture-frame clamp .....	E. N. Porter .....	207,441	Aug. 27, 1878	837	248	14	324
Picture-frame-cord holder .....	F. H. Moore .....	201,035	Mar. 5, 1878	216	68	13	448
Picture-frames, Machine for nailing and clamping .....	M. Rose .....	199,579	Jan. 22, 1878	890	261	13	163
Picture-hook .....	H. L. Judd .....	201,680	Mar. 26, 1878	905	276	13	564
Picture-hook .....	R. S. Merrill .....	200,213	Feb. 12, 1878	326	98	13	292
Picture-hook .....	R. S. Merrill .....	201,695	Mar. 26, 1878	917	280	13	566
Picture-nail .....	H. L. Judd .....	201,681	Mar. 26, 1878	905	277	13	564
Picture-nails, Spring-head for .....	W. E. Jones .....	201,534	Mar. 19, 1878	746	227	13	537
Picture-rod molding .....	L. J. Baker .....	203,526	May 14, 1878	323	91	13	873
Picture-rod molding .....	H. F. Nye .....	204,754	June 11, 1878	343	104	13	1063
Pictures, Producing metallic .....	F. Tuchfarber .....	203,568	May 14, 1878	371	104	13	879
Pictures, Producing panoramic .....	H. Decker .....	204,657	June 11, 1878	241	75	13	1050
Pictures, Producing transfer .....	C. Palm and J. Fechteler .....	209,952	Nov. 12, 1878	450	14	745	
Pie-turner .....	N. P. Maddocks .....	200,742	Feb. 26, 1878	894	263	13	393
Pier .....	E. Wasell .....	207,228	Aug. 20, 1878	605	182	14	289
Pigment .....	W. Prescott .....	207,773	Sept. 3, 1878	193	104	14	373
Pigment, Furnace .....	H. Krum .....	208,828	Oct. 8, 1878	399	114	14	550
Pile .....	J. Corry .....	205,615	July 2, 1878	154	47	14	29
Pile .....	D. B. Oliver .....	199,311	Jan. 15, 1878	613	179	13	111
Pile-driver .....	G. H. Cavanagh .....	205,244	June 25, 1878	887	262	13	1141
Pile-driver .....	N. F. Libbey and P. Hatch .....	199,299	Jan. 15, 1878	602	176	13	169
Pile for making skelps .....	D. B. Oliver .....	198,854	Jan. 1, 1878	132	37	13	29
Pile for rerolling old rails .....	L. Jones .....	202,206	Apr. 9, 1878	432	126	13	664
Pile-tube, Collapsible .....	E. R. Post .....	208,761	Oct. 8, 1878	329	94	14	540
Pillow .....	H. J. Buell .....	200,504	Feb. 19, 1878	630	185	13	346
Pillow .....	M. B. Wallace .....	205,929	July 9, 1878	518	147	14	78
Pillow-sham .....	C. A. Weed .....	202,387	Apr. 16, 1878	573	163	13	688
Pillow-spring .....	T. W. Cardoza .....	201,911	Apr. 2, 1878	54	14	13	606
Pillow-spring .....	E. L. Grable .....	200,281	Feb. 12, 1878	398	118	13	302
Pills, Soluble coating for .....	W. N. Clark .....	209,654	Nov. 5, 1878	131	14	698	
Pin:							
See Breast-pin. Piano-tuning pin.							
Brooch-pin. Picket-pin.							
Car-coupling pin. Safety-pin.							
Clothes-pin. Tent-pin.							
Dowel-pin. Wooden pin.							
Flower-pin.							
Pinchers for applying fence-barbs .....	J. W. Edwards .....	199,965	Feb. 5, 1878	75	25	13	245
Pinchers, Wire-drawing .....	V. D. P. Kenerson .....	205,488	July 2, 1878	25	8	14	12
Pipe:							
See Asphaltum or ce- Pump-suction pipe.							
ment pipe. Sheet-metal pipe.							
Blow-pipe. Smoking-pipe.							
Cement and asphalt- Soap-bubble pipe.							
tum pipe. Sprinkling-pipe.							
Cigar-pipe. Stand-pipe.							
Draft-pipe. Stove-pipe.							
Hose-pipe. Tobacco-pipe.							
Leader-pipe. Waste-pipe.							
Organ-pipe.							
Pipe .....	H. Tibbo .....	205,816	July 9, 1878	399	114	14	63
Pipe and hose coupling, Soft-metal .....	S. A. Brumbaugh .....	199,784	Jan. 29, 1878	1123	329	13	207
Pipe-connections, Vitreous lining for .....	E. H. Austin .....	209,103	Oct. 22, 1878	730	211	14	603
Pipe-coupling .....	T. T. Farnsworth .....	205,069	June 18, 1878	692	204	13	1111
Pipe-coupling .....	G. H. Griggs .....	202,942	Apr. 30, 1878	1192	344	13	778
Pipe-coupling .....	C. H. Perkins .....	199,312	Jan. 15, 1878	615	179	13	111
Pipe-coupling .....	S. P. M. Tasker .....	202,384	Apr. 16, 1878	470	167	13	687
Pipe-coupling nipple .....	C. M. Handover .....	204,566	June 4, 1878	134	45	13	1031
Pipe-coupling or joint .....	J. Enright .....	210,414	Dec. 3, 1878	27	6	14	827
Pipe-coupling or leak-stopper .....	A. J. Sweetland .....	208,547	Oct. 1, 1878	90	27	14	501
Pipe-cover .....	C. M. Mitchell .....	205,888	July 9, 1878	471	134	14	72
Pipe cutters or wrenches, Cutter for .....	C. Fenton .....	208,582	Oct. 1, 1878	130	38	14	506
Pipe cutting and threading machine .....	J. B. Eaton and C. Latham .....	206,095	July 16, 1878	697	201	14	106
Pipe-fastener, Adjustable .....	G. Burkhardt .....	208,150	Sept. 17, 1878	616	182	14	436
Pipe-joint .....	L. T. Scofield .....	199,108	Jan. 8, 1878	393	117	13	78
Pipe joint and coupling .....	A. Bodart .....	210,906	Dec. 17, 1878	592	163	14	917



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Pipe-molding machine	F. Shickle	200,130	Oct. 22, 1878	775	225	14	686
Pipe-molding machine	F. Shickle	200,428	Oct. 29, 1878	1073	311	14	633
Pipe-stem	J. W. Tallmadge	200,725	Nov. 5, 1878	265	61	14	706
Pipe union or joint	J. Shaw	198,818	Jan. 1, 1878	98	27	13	23
Pipe-wrench	C. C. Coleman	200,175	Feb. 12, 1878	294	87	13	257
Pipe-wrench	D. Fisher	203,822	May 21, 1878	640	180	13	210
Pipe-wrench	L. Glynn	203,261	May 7, 1878	26	9	13	824
Pipe-wrench	J. Hartman, jr.	205,081	June 18, 1878	704	209	13	1112
Pipe-wrench	B. S. Myers	207,182	Aug. 20, 1878	558	167	14	283
Pipe-wrench with cutter	J. Brewer	207,102	Aug. 20, 1878	480	144	14	273
Pipe-wrench with cutter	W. L. Truland	208,440	Sept. 24, 1878	936	275	14	480
Pipes and tubes from rubber, paper, cloth, &c., Machine for the manufacture of.	H. J. Menens	207,884	Sept. 10, 1878	323	98	14	333
Pipes, Machine for turning	B. A. Jonasson	210,857	Dec. 17, 1878	518	147	14	909
Pipes, Testing	E. P. Smith	201,841	Mar. 26, 1878	1069		13	583
Pistol-handles, Machine for checking	J. H. Bullard	210,180	Nov. 26, 1878	724	215	14	789
Pistol-holster	W. N. Le Page	202,733	Apr. 23, 1878	956	275	13	714
Pistol-springs, Manufacture of	T. B. Andrews	205,988	July 16, 1878	593		14	51
Pistols, &c., Extension-stock for	S. W. Johnson	202,946	Apr. 30, 1878	1196	345	13	778
Piston	W. Sprague	200,098	Feb. 5, 1878	268	65	13	205
Piston, Steam-engine	N. Foust	201,061	Mar. 26, 1878	890	271	13	561
Pitcher	S. W. Babbitt	206,997	Aug. 13, 1878	366	110	14	214
Pitcher, Ale	S. Crowell	199,188	Jan. 15, 1878	495	145	13	93
Pitcher, Crockery	T. Loughran	203,472	May 7, 1878	249	72	13	855
Pitcher, Double-walled	H. B. Beach	208,056	Sept. 17, 1878	520	155	14	424
Pitcher, Ice	H. B. Beach	202,980	Apr. 30, 1878	1230	355	13	783
Pitcher, Ice	H. B. Beach	209,446	Oct. 29, 1878	1091	318	14	616
Pitcher, Ice	T. C. Smith	207,910	Sept. 10, 1878	352	107	14	396
Pitcher, Sirup	H. B. Beach	208,507	Oct. 1, 1878	51	16	14	455
Pitchers, &c., Cover for	L. Selling	207,987	Sept. 10, 1878	433	130	14	407
Pitch forks, Machine for making	H. B. Kinney	202,658	Apr. 23, 1878	883	253	13	735
Pitman-connection	R. M. Lamson	200,401	Feb. 19, 1878	590	174	13	240
Pitman-connection	A. Tornquist	210,646	Dec. 10, 1878	291	80	14	870
Pitman-joint	J. Conley	208,571	Oct. 1, 1878	120	35	14	505
Pivot-turning attachment	W. N. Manning	199,217	Jan. 15, 1878	520	153	13	97
Plaiting-machine	W. Beukler	204,704	June 11, 1878	288	89, 90	13	1016
Plaiting-machine	M. Bradley	207,796	Sept. 10, 1878	228	71	14	311
Plaiting-machine	C. Fichter	199,813	Jan. 29, 1878	1149	338	13	211
Plaiting-machine	E. S. Harding	210,605	Dec. 10, 1878	246	67	14	885
Plaiting-machine	J. Hochheimer	202,346	Apr. 16, 1878	534	156	13	682
Plaiting-machine	M. A. Maybee	207,127	Aug. 20, 1878	503	151	14	276
Plaiting-machine	L. C. West	205,775	July 9, 1878	350	101	14	56
Plaiting-machine	J. E. Wilson	202,211	Apr. 9, 1878	373	110	13	616
Plane, Bench	J. B. Boyce	199,956	Feb. 5, 1878	67	21	13	243
Plane, Bench	H. A. Foss	207,599	Sept. 3, 1878	16	5	14	231
Plane, Bench	P. Gallagher	200,246	Oct. 22, 1878	876	254	14	612
Plane, Bench	R. S. Griffin	203,442	May 7, 1878	222	63	13	150
Plane, Bench	D. M. Heald	209,969	Nov. 19, 1878	482	146	14	713
Plane, Bench	J. F. Smith	202,674	Apr. 23, 1878	900	258	13	737
Plane, Bench	H. P. Taylor	201,068	Mar. 5, 1878	246	78	13	482
Plane, Bench	J. A. Traut	206,507	July 30, 1878	1204	346	14	177
Plane, Carpenter's	L. Bailey	202,918	Apr. 30, 1878	1171	357	13	775
Planing and sawing machine, Wood	W. H. Webb	204,403	May 28, 1878	1270	362	13	1064
Planing-machine	J. B. D. Leavitt	204,056	May 21, 1878	886	214	13	912
Planing-machine	W. R. Morris	201,624	Mar. 26, 1878	856	260	13	516
Planing-machine	J. Ross	210,149	Nov. 19, 1878	675	201	14	779
Planing-machine	J. B. Stockham	201,366	Mar. 19, 1878	577	177	13	513
Planing machine, Metal	O. R. Chaplin	206,424	July 30, 1878	1114	318	14	166
Planing machine, Wood	W. H. Doane	206,545	July 30, 1878	1228	356	14	181
Planing octagonal blanks for cloths pins, Machine for	A. Hall, jr.	199,364	Jan. 22, 1878	680	199	13	120
Planing timber, Machine for	H. Atkinson	204,781	Jan. 11, 1878	377	112	13	1068
Plant duster	J. O'Brien	201,441	Mar. 19, 1878	651	199	13	524
Plants, Machine for distributing poison upon	J. Goodheart	204,720	June 11, 1878	397	95	13	1010
Planter and check-row marker, Corn	W. M. Carriker	207,250	Aug. 20, 1878	630	188	14	252
Planter and cultivator, Combined seed	S. E. Harris	206,444	July 30, 1878	1135	326	14	168
Planter and drill, Check-row corn	O. C. Du Souchet	209,671	Nov. 5, 1878	149	43, 44	14	701
Planter and fertilizer-distributor, Cotton	J. A. Shine	201,204	Mar. 12, 1878	383	119	13	480
Planter and fertilizer-distributor, Seed	T. S. Smith and C. C. Boyle	202,878	Apr. 23, 1878	1116	320	13	764
Planter and guano-distributor, Seed	J. C. Williams	208,657	Oct. 1, 1878	208	59	14	517
Planter and marker, Corn	F. C. Frost	205,555	July 2, 1878	74	22	14	19
Planter and seed drill, Corn	D. Hays	204,218	May 28, 1878	1085	309	13	981
Planter attachment, Check-row	S. J. and C. Weickel	199,127	Jan. 8, 1878	419	123	13	81
Planter attachment, Corn	W. Armsworth and J. H. Brown	201,479	Mar. 19, 1878	688	210	13	529
Planter attachment, Corn	J. J. Carey	200,171	Feb. 12, 1878	291	86	13	286
Planter attachment, Corn	J. Neill	205,973	July 16, 1878	579	165	14	91
Planter attachment, Corn	W. F. Senter	202,196	Apr. 9, 1878	362	106	13	654
Planter, Check-row	C. G. Gross	210,988	Dec. 17, 1878	694	191	14	229
Planter, Check-row corn	J. C. Elder	210,306	Nov. 26, 1878	856	251	14	806
Planter, Check-row corn	H. N. McConoughey	205,283	June 25, 1878	924	275	13	1146
Planter, Corn	R. H. Avery	199,344	Jan. 15, 1878	647	189	13	117
Planter, Corn	R. H. Avery	202,625	Apr. 23, 1878	847	243	13	731
Planter, Corn	A. Berghold and T. Forstner	208,668	Oct. 8, 1878	227	65	14	557
Planter, Corn	E. L. Bergstresser	199,401	Jan. 22, 1878	715	211	13	135
Planter, Corn	C. Berryman	201,489	Mar. 19, 1878	697	213	13	531
Planter, Corn	J. W. Brigham and T. M. Flen-niken	208,885	Oct. 15, 1878	471	136	14	563
Planter, Corn	G. W. Brown	178,760	Jan. 1, 1878	36	9	13	13
Planter, Corn	G. W. Brown	203,097	May 21, 1878	826	236	13	944
Planter, Corn	R. Brown and W. Houston	199,783	Jan. 29, 1878	1121	329	13	207
Planter, Corn	W. M. Carriker	200,027	Feb. 5, 1878	132	43	13	254

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Planter, Corn	W. B. Chambers and J. E. Bering	207,251	Aug. 20, 1878	630	188	14	292
Planter, Corn	J. V. Cloyd	200,029	Feb. 5, 1878	133	44	13	254
Planter, Corn	C. E. Coe	210,753	Dec. 10, 1878	401	109	14	884
Planter, Corn	O. S. Deming	205,618	July 2, 1878	157	47	14	29
Planter, Corn	J. R. Dodge, Jr., and W. G. Mast	198,874	Jan. 1, 1878	154	44	13	32
Planter, Corn	H. E. Foster	203,025	Apr. 30, 1878	1274	368	13	788
Planter, Corn	W. W. Goodwin and S. W. Hurlburt	207,028	Aug. 13, 1878	388	120	14	258
Planter, Corn	O. C. Green	201,521	Mar. 19, 1878	731	223	13	536
Planter, Corn	J. W. Harbin	200,280	Feb. 12, 1878	401	119	13	303
Planter, Corn	A. Hearst and W. W. Dunn	210,531	Dec. 3, 1878	154	40	14	843
Planter, Corn	A. Heckman	203,149	Apr. 30, 1878	1395	408	13	805
Planter, Corn	A. Heckman	208,015	Sept. 17, 1878	476	143	14	418
Planter, Corn	M. Humphrey	210,537	Dec. 3, 1878	160	42	14	844
Planter, Corn	F. E. Joel	203,487	July 2, 1878	23	8	14	12
Planter, Corn	J. Leimbach and G. H. Wilson	205,878	July 6, 1878	462	131	14	71
Planter, Corn	M. Martischang	209,973	Nov. 10, 1878	489	149	14	753
Planter, Corn	D. E. Moore	205,890	July 9, 1878	473	135	14	72
Planter, Corn	J. D. Pope	200,087	Feb. 5, 1878	109	62	13	264
Planter, Corn	E. D. and O. B. Reynolds	209,293	Oct. 22, 1878	922	269	14	620
Planter, Corn	A. and M. Runstetter	204,693	May 21, 1878	020	265	13	957
Planter, Corn	T. A. Sammons	209,717	Nov. 5, 1878	194	58	14	707
Planter, Corn	O. B. Seamans, V. A. Bryant, and H. Devling	201,454	Mar. 19, 1878	065	202	13	526
Planter, Corn	G. A. Sharp	209,718	Nov. 5, 1878	106	58	14	707
Planter, Corn	J. D. Smith	199,113	Jan. 8, 1878	309	119	13	78
Planter, Corn	H. Steckler, Jr.	204,390	May 28, 1878	1256	358	13	1002
Planter, Corn	L. V. Swisher	201,717	Mar. 26, 1878	040	289	13	569
Planter, Corn	H. Timmersmann	200,415	Feb. 19, 1878	544	161	13	333
Planter, Corn	G. M. Titus	210,225	Nov. 26, 1878	772	229	14	795
Planter, Corn	W. S. Turner	203,960	May 21, 1878	786	225	13	939
Planter, Corn	T. W. Tyler and W. C. Baskin	204,925	June 18, 1878	552	161	13	1002
Planter, Corn	A. Wilber	203,305	May 7, 1878	76	23	14	830
Planter, Corn	J. H. Woodgate	209,950	Nov. 12, 1878	448	136	14	745
Planter, Corn	J. Wright and G. McNary	207,148	Aug. 20, 1878	522	157	14	278
Planter, Corn	C. and F. Wysong	208,503	Oct. 1, 1878	48	10	14	496
Planter, Corn	J. H. Zarley	209,440	Oct. 29, 1878	1086	316	14	656
Planter, Corn and cotton	S. S. and J. P. Clary	206,089	July 10, 1878	601	200	14	105
Planter, Corn and cotton seed	B. F. Adams	202,133	Apr. 9, 1878	204	87	13	645
Planter, Cotton and pumpkin	P. B. Still	203,211	Apr. 30, 1878	1463	428	13	813
Planter, Cotton	W. H. Bowman	200,968	Mar. 5, 1878	145	47	13	438
Planter, Cotton	W. W. Chapman	206,772	Aug. 6, 1878	119	37	14	221
Planter, Cotton	W. W. Woodward	210,390	Nov. 26, 1878	956	277	14	810
Planter, Cotton and corn	J. M. Hall	210,604	Dec. 10, 1878	246	67	14	865
Planter, Cotton seed	J. Lytch	200,141	Feb. 12, 1878	259	78	13	281
Planter, Cotton seed	M. L. Nix, J. M. Stone, and L. Anderson	200,750	Feb. 26, 1878	902	265	13	395
Planter, Cotton seed	R. M. Patillo	200,508	Oct. 29, 1878	1156	336	14	666
Planter, cultivator, and cotton-chopper, Combined	R. Sarlis and A. Kelman	204,765	June 11, 1878	354	106	13	1064
Planter, cultivator, and fertilizer-distributor	S. J. Keim	208,824	Oct. 8, 1878	390	113	14	549
Planter, Grain	C. E. Mc Bonn	208,914	Oct. 15, 1878	506	146	14	568
Planter, Hand corn	W. Shepard	209,929	Nov. 12, 1878	428	129	14	742
Planter, Hand corn	J. Shew	202,593	Apr. 16, 1878	796	229	13	715
Planter, Hand corn and bean	A. Hoag	204,574	June 4, 1878	142	47	13	1033
Planter, Horse-power corn	A. H. Fessenden	210,845	Dec. 17, 1878	507	143	14	907
Planter, land-roller, and fertilizer-distributor, Combined	R. B. Werner	200,690	Feb. 10, 1878	716	211	13	350
Planter, marker, and cultivator, Corn	L. A. Cooper	205,529	July 2, 1878	69	20	14	18
Planter, Potato	T. J. Davis	209,607	Nov. 5, 1878	74	21	22	690
Planter, Seed	J. C. Barlow	204,941	June 18, 1878	567	166	13	1094
Planter, Seed	R. O. Bean	204,703	June 11, 1878	287	89	13	1056
Planter, Seed	G. L. Butler	202,147	Apr. 9, 1878	306	91	13	647
Planter, Seed	R. L. Cleveland	205,174	June 25, 1878	811	241	13	1132
Planter, Seed	S. B. Davis	203,122	Apr. 30, 1878	1362	397	13	801
Planter, Seed	P. B. Doty	201,508	Mar. 19, 1878	718	218	13	534
Planter, Seed	W. T. Easterday	207,404	Aug. 27, 1878	707	237	14	319
Planter, Seed	R. Fitzsimons	210,111	Nov. 10, 1878	635	189	14	773
Planter, Seed	S. R. Hawley	210,118	Nov. 19, 1878	644	191	14	774
Planter, Seed	D. W. Hoshall	210,535	Dec. 3, 1878	158	42	14	844
Planter, Seed	J. Laude	204,983	June 18, 1878	607	178	13	1099
Planter, Seed	C. E. Patrie	203,262	Sept. 24, 1878	754	221	14	456
Planter, Seed	W. M. Rape	208,847	Oct. 8, 1878	426	124	14	553
Planter, Seed	W. C. Smith	203,951	May 21, 1878	777	223	13	938
Planter, Seed	T. R. Swan	201,715	Mar. 26, 1878	938	288	13	569
Planter, Seed	A. J. West	205,020	June 18, 1878	641	188	13	1104
Planter, Seed	G. A. Woods	208,945	Oct. 15, 1878	540	159	14	572
Planters, Check-row attachment for corn	A. H. Law	208,020	Sept. 17, 1878	482	144	14	418
Planters, Check-row attachment for corn	T. C. Lord	210,240	Nov. 26, 1878	896	262	14	811
Planters, Check-row attachment for corn	G. L. Rider	207,683	Sept. 3, 1878	99	30	14	361
Planters, Check-row attachment for seed	G. W. Rogers	205,810	July 9, 1878	392	112	14	62
Planters, Check-row attachment to corn	E. W. Quincy	200,407	Feb. 19, 1878	536	159	13	332
Planters, Check-row wire stop for corn	W. B. Chambers	206,702	Aug. 6, 1878	47	15	14	212
Planters, Check-rower attachment for corn	E. R. Carr	199,410	Jan. 22, 1878	723	213	13	137
Planters, Check-rower for corn	H. N. McConoughey	203,357	May 7, 1878	125	37	13	837
Planters, Check-rower for corn	J. P. Moos	208,195	Sept. 17, 1878	663	195	14	442
Planters, Check-rower for corn	S. W. Perkins	210,143	Nov. 19, 1878	670	199	14	778
Planters, Corn-dropper for	J. L. Wright	199,485	Jan. 22, 1878	793	233	13	148
Planters, Seed-dropping attachment for corn	R. L. Patterson	210,958	Dec. 17, 1878	646	179	14	924
Planters, Self-dropper for	J. Butterfield	200,692	Feb. 26, 1878	843	248	13	386
Planting and hilling machine, Corn	L. Dunne	209,670	Nov. 5, 1878	147	43	14	700
Planter	S. A. Griffith	209,560	Nov. 5, 1878	24	8	14	684

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Plaster bandages, Machine for making .....	C. G. Hill .....	200,045	Oct. 15, 1878	653	188	14	587
Plate-holder .....	J. and J. Stock .....	204,632	June 4, 1878	209	67	13	1042
Platform: See Car-platform. Harvester-platform. Depot-platform.							
Platform-spring .....	M. C. West .....	199,336	Jan. 15, 1878	640	187	13	115
Pliers .....	F. S. Allen and H. C. Lane .....	208,878	Oct. 8, 1878	458	132	14	557
Plotting instrument, Surveyor's .....	D. F. Hitt .....	200,060	Feb. 5, 1878	170	55	13	259
Plow .....	E. H. Babcock, J. C. Whiting, and O. H. Chamberlain .....	199,398	Jan. 22, 1878	713	210	13	135
Plow .....	E. Barber .....	202,090	Apr. 9, 1878	248	73	13	639
Plow .....	F. A. Barrows .....	199,493	Jan. 22, 1878	801	235	13	149
Plow .....	J. M. Bassett .....	205,992	July 16, 1878	597	172	14	473
Plow .....	S. H. Bogenrief and W. Pattison .....	201,153	Mar. 12, 1878	349	104	13	473
Plow .....	N. P. Bowsher .....	205,236	June 25, 1878	879	260	13	1140
Plow .....	P. H. Burns and W. G. McElhany .....	201,222	Mar. 12, 1878	403	124	13	482
Plow .....	E. J. Camp .....	201,225	Mar. 12, 1878	407	125	13	483
Plow .....	H. H. Canaday .....	210,992	Dec. 17, 1878	686	189	14	928
Plow .....	J. C. Carpenter .....	201,887	Mar. 19, 1878	598	183	13	516
Plow .....	W. Dickerson and W. H. Strain .....	211,002	Dec. 17, 1878	699	192	14	939
Plow .....	L. sr., E., and L. Eberle, jr. .....	201,510	Mar. 10, 1878	720	219	13	534
Plow .....	D. P. Ferguson .....	199,812	Jan. 29, 1878	1149	337	13	211
Plow .....	H. Gale .....	200,861	Mar. 5, 1878	46	10	13	422
Plow .....	H. J. Gentzsch, sr. .....	207,900	Sept. 10, 1878	406	122	14	403
Plow .....	L. Gibbs .....	205,631	July 2, 1878	171	51	14	31
Plow .....	L. Gibbs .....	207,174	Aug. 20, 1878	548	164	14	281
Plow .....	J. H. Gilleland .....	206,723	Aug. 8, 1878	66	22	14	215
Plow .....	A. Goodyear .....	209,758	Nov. 12, 1878	251	75	14	719
Plow .....	G. S. Haven .....	202,817	Apr. 23, 1878	1052	802	13	754
Plow .....	G. S. Haven .....	208,680	Oct. 8, 1878	241	69	14	539
Plow .....	C. E. Hunter .....	205,552	July 2, 1878	93	26	14	26
Plow .....	T. E. Jefferson .....	210,201	Nov. 26, 1878	748	222	14	792
Plow .....	T. E. Jefferson .....	210,202	Nov. 26, 1878	740	222	14	792
Plow .....	W. F. and C. W. Jenkins .....	210,203	Nov. 26, 1878	750	222	14	792
Plow .....	F. K. Jennings .....	207,873	Sept. 10, 1878	313	95	14	302
Plow .....	F. Johnson .....	206,580	Aug. 13, 1878	245	77	14	241
Plow .....	W. Kerschner, T. S. and F. M. Monger .....	208,320	Sept. 24, 1878	812	237	14	464
Plow .....	J. C. Knoblock and T. M. Bissell .....	200,734	Feb. 26, 1878	889	261	13	392
Plow .....	C. Koppenheffer .....	201,786	Mar. 26, 1878	1014	310	13	590
Plow .....	J. Lano .....	204,902	June 18, 1878	527	154	13	1039
Plow .....	J. Lano .....	205,491	July 2, 1878	28	9	14	12
Plow .....	J. Lano .....	209,174	Oct. 22, 1878	809	235	14	613
Plow .....	L. Ling .....	205,657	July 2, 1878	203	61	14	35
Plow .....	J. Long .....	207,751	Sept. 8, 1878	171	52	14	371
Plow .....	L. J. Lowe .....	199,558	Jan. 22, 1878	871	255	13	161
Plow .....	J. W. Mahoney .....	199,215	Jan. 15, 1878	519	152	13	97
Plow .....	J. Martin .....	200,600	Aug. 6, 1878	151	48	14	225
Plow .....	W. L. Mathews .....	198,773	Jan. 1, 1878	53	14	13	16
Plow .....	S. P. McKinney .....	210,548	Dec. 3, 1878	171	45	14	645
Plow .....	T. F. McNair .....	209,282	Oct. 22, 1878	912	266	14	627
Plow .....	C. P. McWane .....	206,958	Aug. 13, 1878	321	98	14	240
Plow .....	R. B. Mitchell .....	209,412	Oct. 29, 1878	1053	306	14	651
Plow .....	W. S. Moon .....	200,559	Feb. 19, 1878	687	202	13	354
Plow .....	T. M. Moore .....	204,358	May 28, 1878	1226	349	13	998
Plow .....	C. Myers .....	200,067	Oct. 15, 1878	680	196	14	591
Plow .....	A. Newsom .....	199,736	Jan. 29, 1878	1075	314	13	199
Plow .....	F. Nitschmann .....	204,361	May 28, 1878	1230	350	13	999
Plow .....	J. Nonac and J. A. Howe .....	201,281	Mar. 12, 1878	469	144	13	492
Plow .....	J. O'Farrell .....	207,130	Aug. 20, 1878	506	153	14	276
Plow .....	J. Oldendorph, jr. .....	202,746	Apr. 23, 1878	972	279	13	746
Plow .....	J. M. Payne .....	198,902	Jan. 1, 1878	186	52	13	37
Plow .....	O. F. Phillips .....	205,977	July 16, 1878	583	167	14	91
Plow .....	W. J. Pirkle .....	200,755	Feb. 26, 1878	900	267	13	385
Plow .....	J. Pollock .....	201,355	Mar. 19, 1878	568	174	13	512
Plow .....	G. and P. Reese .....	203,192	Apr. 30, 1878	1441	421	13	810
Plow .....	W. G. Rehl .....	207,895	Sept. 10, 1878	338	102	14	395
Plow .....	J. H. Riggan .....	200,478	Feb. 19, 1878	607	179	13	343
Plow .....	A. Sipe .....	199,750	Jan. 29, 1878	1087	310	13	591
Plow .....	C. A. Smith .....	209,779	Nov. 12, 1878	271	81	14	721
Plow .....	C. P. Snow .....	205,500	July 2, 1878	47	14	14	15
Plow .....	W. Strait .....	208,048	Sept. 17, 1878	512	152	14	422
Plow .....	F. Striddle .....	206,639	July 30, 1878	1341	386	14	193
Plow .....	H. R. Underhill .....	204,513	June 4, 1878	85	29	13	1025
Plow .....	J. Urie, sr. .....	210,728	Dec. 10, 1878	375	102	14	890
Plow .....	T. I. Wado .....	201,576	Mar. 10, 1878	791	241	13	543
Plow .....	S. F. Wadleigh and O. N. and G. S. Roberts .....	207,834	Sept. 10, 1878	266	83	14	286
Plow .....	C. A. Weed .....	201,471	Mar. 19, 1878	680	207	13	528
Plow .....	W. E. Whitcomb .....	206,511	July 30, 1878	1208	347	14	177
Plow .....	G. W. Wiggins .....	210,170	Nov. 19, 1878	792	200	14	782
Plow .....	B. Williams and C. C. Morgan .....	206,654	July 30, 1878	1358	390	14	185
Plow .....	J. L. Wilson and R. G. Morrow .....	202,972	Apr. 30, 1878	1223	353	13	782
Plow .....	G. W. and W. F. Wimpee .....	202,688	Apr. 23, 1878	916	261	13	736
Plow .....	R. W. Workman .....	205,458	June 25, 1878	1104	327	13	1170
Plow .....	E. Yeiser .....	199,608	Jan. 22, 1878	925	271	13	168
Plow and attachment, Turning .....	R. Wixson .....	205,164	June 18, 1878	787	233	13	1124
Plow and cultivator .....	L. M. Otwell .....	210,351	Nov. 26, 1878	911	266	14	613
Plow and grain-drill .....	H. A. Avery .....	209,069	July 16, 1878	672	194	14	108
Plow and harrow, Attachment shovel .....	A. Heartsill .....	209,043	Oct. 15, 1878	651	188	14	587
Plow and harrow, Combined .....	W. G. Humrod .....	209,046	Oct. 15, 1878	654	189	14	587
Plow and harrow, Combined .....	J. C. Teague .....	205,317	June 25, 1878	964	285	13	1151
Plow and marker, Combined .....	C. M. Burns .....	202,985	Apr. 30, 1878	1234	356	13	783
Plow and seeder .....	T. H. Elliott .....	200,444	Feb. 19, 1878	574	169	13	357

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				Spec.	Dr'g.	Vol.	Page.
Plow attachment.....	W. A. and J. D. Bolick, and J. T. Faucett.	210, 290	Nov. 26, 1878	840	247	14	804
Plow attachment.....	W. R. Fowler	200, 047	Feb. 5, 1878	158	51	13	258
Plow attachment.....	M. and D. Hain	209, 885	Nov. 12, 1878	380	114	14	736
Plow attachment.....	J. McBride	199, 082	Jan. 8, 1878	369	109	13	74
Plow attachment.....	J. D. Munson	204, 841	June 11, 1878	442	129	13	1074
Plow-beam.....	F. E. Bump and J. W. Gear	207, 497	Aug. 27, 1878	898	264	14	331
Plow, Bog-cutting.....	A. B. Cady	205, 612	July 2, 1878	152	46	14	20
Plow-clearer.....	H. T. Rector	205, 574	July 2, 1878	120	35	14	24
Plow-clevis.....	J. F. Ellis and C. Robinson	206, 167	July 23, 1878	801	229	14	122
Plow-clevis.....	H. Estes	208, 899	Oct. 15, 1878	491	141	14	566
Plow-clevis.....	D. A. Kennedy	200, 730	Feb. 26, 1878	883	259	13	391
Plow-clevis.....	W. Masters	208, 621	Oct. 1, 1878	165	48	14	511
Plow-clevis.....	H. T. Noble	201, 120	Mar. 12, 1878	307	94	13	468
Plow-clevis.....	J. W. Powers	210, 877	Dec. 17, 1878	540	154	14	912
Plow-clevis.....	C. Robinson	201, 837	Mar. 26, 1878	1064	324	13	587
Plow-clevis.....	E. A. Sanders	204, 253	May 28, 1878	1119	220	13	985
Plow-colter.....	J. Augspurger	202, 624	Apr. 23, 1878	846	343	13	731
Plow-colter.....	C. Daniel	204, 484	June 4, 1878	63	21	13	1021
Plow-colter.....	E. Jarrell	206, 334	July 23, 1878	1001	285	14	147
Plow-colter.....	W. McGregor	209, 129	Oct. 22, 1878	764	222	14	607
Plow-colter.....	T. Meikle	210, 047	Nov. 19, 1878	565	170	14	764
Plow-colter.....	J. Oxenford	206, 818	Aug. 6, 1878	162	51, 52	14	227
Plow-colter.....	J. Pierpont	200, 842	Mar. 5, 1878	29	10	13	419
Plow-colter holder.....	R. B. Thomson	200, 230	Feb. 12, 1878	344	103	13	294
Plow, Combined hill-side, shovel, and subsoil.....	E. Tate	209, 088	Oct. 15, 1878	700	203	14	593
Plow, Corn.....	P. Brannan	200, 787	Feb. 26, 1878	934	275	13	400
Plow, Corn.....	P. Soderlund	206, 752	Aug. 6, 1878	95	30	14	218
Plow-cutter.....	E. Wansbrough and W. W. Speer	201, 470	Mar. 19, 1878	679	207	13	528
Plow, Ditching.....	J. M. Fudge, F. M. Holmes, and S. McDonald	209, 756	Nov. 12, 1878	249	74	14	718
Plow, Ditching.....	L. M. Koehler	208, 103	Sept. 17, 1878	562	168	14	429
Plow, Ditching.....	L. W. Stuart and J. G. Allen	207, 093	Sept. 10, 1878	439	132	14	408
Plow, Ditching.....	A. Wiley	205, 325	June 25, 1878	976	289	13	1153
Plow frame, Gang.....	J. Currie	201, 097	Mar. 12, 1878	282	87	13	465
Plow, Gang.....	G. and J. Armstrong, Jr	210, 830	Dec. 17, 1878	487	137	14	905
Plow, Gang and sulky.....	H. L. Daniels	199, 622	Jan. 29, 1878	966	281	13	183
Plow, Gang and sulky.....	J. R. McCormick	199, 083	Jan. 8, 1878	369	109 } 110 }	13	74
Plow, harrow, and seed-planter.....	N. M. Fowler	208, 082	Sept. 17, 1878	541	162	14	427
Plow, Hilling.....	G. A. DeLong	201, 099	Mar. 12, 1878	282	87, 88	13	465
Plow-jointer.....	W. J. Welling	210, 588	Dec. 3, 1878	218	58	14	851
Plow-point.....	P. Kessler	209, 406	Oct. 29, 1878	1047	305	14	650
Plow-point.....	S. M. White and J. A. Francis	206, 910	Aug. 13, 1878	280	85	14	244
Plow-point.....	D. Wolf	203, 690	May 14, 1878	489	138	13	894
Plow-regulator.....	D. M. Johnson	200, 919	Mar. 5, 1878	99	34	13	430
Plow, Reversible.....	P. Bouchet	199, 954	Feb. 5, 1878	65	21	13	243
Plow, Reversible.....	C. Daniel	199, 036	Jan. 8, 1878	324	95	13	66
Plow, Reversible.....	B. F. Morris	199, 093	Jan. 8, 1878	379	113	13	76
Plow, Riding.....	R. S. Higgins	206, 732	Aug. 6, 1878	76	24	14	216
Plow, Riding.....	D. W. Hughes	210, 425	Dec. 3, 1878	38	8	14	828
Plow, Rotary.....	D. H. Lane	208, 246	Sept. 24, 1878	733	215	14	454
Plow, Rotary mold-board.....	N. Palmar	205, 498	July 2, 1878	35	11	14	13
Plow, Shovel.....	T. W. Boyle	200, 819	Mar. 5, 1878	5	2	13	415
Plow, Side-hill.....	J. W. Barnett and T. J. Hobbs	206, 070	July 16, 1878	673	194	14	103
Plow, Side-hill.....	H. F. and G. F. Shaw	200, 413	Feb. 19, 1878	542	160	13	332
Plow, Side-hill.....	L. E. Wilson and J. E. McCandles	207, 468	Aug. 27, 1878	867	256	14	327
Plow-standard.....	T. Meikle	209, 284	Oct. 22, 1878	914	267	14	628
Plow-standard.....	J. F. Ryan	206, 830	Aug. 6, 1878	175	55	14	228
Plow, Steam.....	J. Beard	204, 790	June 11, 1878	386	114	13	1068
Plow-stock.....	P. Boone	206, 766	Aug. 6, 1878	110	35	14	220
Plow-stock.....	S. Carnes	202, 987	Apr. 30, 1878	1235	357	13	784
Plow-stock.....	C. M. Crossley	208, 074	Sept. 17, 1878	534	160	14	426
Plow-stock.....	V. R. Davis	208, 664	Oct. 1, 1878	214	61	14	517
Plow-stock.....	I. J. Saunders	203, 948	May 21, 1878	774	222	13	938
Plow-stock, Adjustable.....	J. K. Kirksey	207, 530	Aug. 27, 1878	937	275	14	336
Plow, Sulky.....	J. E. Alexander	208, 053	Sept. 17, 1878	517	154	14	423
Plow, Sulky.....	W. D. Arnett	209, 374	Oct. 29, 1878	1020	296	14	645
Plow, Sulky.....	I. Berdan	205, 827	July 9, 1878	410	117	14	65
Plow, Sulky.....	B. C. Bradley and C. A. Hague	200, 249	Feb. 12, 1878	364	108	13	297
Plow, Sulky.....	R. C. Buckley	200, 502	Feb. 19, 1878	628	185	13	346
Plow, Sulky.....	E. C. Budd	199, 689	Jan. 29, 1878	1035	302	13	193
Plow, Sulky.....	T. B. Chamberlin	201, 227	Mar. 12, 1878	410	126	13	483
Plow, Sulky.....	S. Dixon	207, 720	Sept. 3, 1878	139	42	14	367
Plow, Sulky.....	S. E. Drake	199, 626	Jan. 29, 1878	972	283	13	183
Plow, Sulky.....	J. W. Eberhart	203, 432	May 7, 1878	208	60	13	818
Plow, Sulky.....	N. Elmer	200, 650	Feb. 26, 1878	797	234 } 235 }	13	379
Plow, Sulky.....	S. T. Ferguson	200, 038	Feb. 5, 1878	144	47	13	256
Plow, Sulky.....	J. B. Fisher	201, 765	Mar. 26, 1878	991	303	13	577
Plow, Sulky.....	J. B. Fisher	203, 903	May 21, 1878	722	207	13	931
Plow, Sulky.....	J. B. Fisher	207, 598	Sept. 3, 1878	13	5	14	351
Plow, Sulky.....	D. O. Fosgate	207, 650	Sept. 3, 1878	69	21	14	357
Plow, Sulky.....	F. M. Foster	204, 890	June 18, 1878	515	150	13	1087
Plow, Sulky.....	J. F. Glidden and P. W. Vaughan	202, 538	Apr. 16, 1878	738	213	13	709
Plow, Sulky.....	G. W. Grecner	211, 007	Dec. 17, 1878	703	194	14	930
Plow, Sulky.....	C. A. Hague	199, 153	Jan. 15, 1878	459	135	13	87
Plow, Sulky.....	H. L. Hewitt	201, 670	Mar. 26, 1878	897	273 } 274 }	13	563
Plow, Sulky.....	F. H. Isaacs	208, 978	Oct. 15, 1878	576	167	14	577
Plow, Sulky.....	H. F. Jerauld and J. W. Stolle	202, 349	Apr. 16, 1878	537	157	13	683
Plow, Sulky.....	S. Kirkpatrick	205, 874	July 9, 1878	457	130	14	70
Plow, Sulky.....	J. Lane	205, 752	July 9, 1878	326	94, 95	14	54
Plow, Sulky.....	J. Lane	209, 175	Oct. 22, 1878	810	235	14	613

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Plow, Sulky .....	J. C. Leidy .....	201,925	Mar. 5, 1878	204	64, 65	13	446
Plow, Sulky .....	W. W. Marsh .....	210,867	Dec. 17, 1878	532	150 151	14	910
Plow, Sulky .....	T. Meikle .....	209,283	Oct. 22, 1878	913	266 267	14	628
Plow, Sulky .....	D. W. Palmer .....	207,674	Sept. 3, 1878	91	27	14	280
Plow, Sulky .....	W. H. Parlin .....	199,930	Feb. 5, 1878	43	14	13	229
Plow, Sulky .....	J. Pierpont .....	200,841	Mar. 5, 1878	28	10	13	419
Plow, Sulky .....	C. G. Price and J. M. Merritt .....	203,512	Oct. 29, 1878	1161	338	14	688
Plow, Sulky .....	W. C. Rogers .....	204,091	May 21, 1878	924	264	13	964
Plow, Sulky .....	C. Siegfördner .....	208,426	Sept. 24, 1878	924	270 271	14	478
Plow, Sulky .....	A. W. Tucker .....	202,304	Apr. 9, 1878	471	138	13	609
Plow, Sulky .....	J. C. Welsh .....	206,989	Aug. 13, 1878	350	107	14	233
Plow, Sulky .....	E. Wiard and G. C. Avery .....	204,517	June 4, 1878	90	30, 31	13	1022
Plow, Sulky .....	G. W. Wright .....	205,025	June 18, 1878	645	190	13	1105
Plow, Sulky and cultivator .....	G. P. Price .....	210,147	Nov. 19, 1878	673	200	14	778
Plow, Sulky breaking .....	E. T. Hunter .....	209,688	Nov. 5, 1878	164	48	14	700
Plow, Swivel .....	C. M. Lufkin .....	209,697	Nov. 5, 1878	175	52	14	704
Plow, Vineyard .....	M. Ross .....	204,998	June 18, 1878	622	182	13	1101
Plow, Wheel .....	C. L. Jackson .....	199,443	Jan. 22, 1878	751	220	13	411
Plow, Wheel .....	O. S. Meckham .....	210,137	Nov. 19, 1878	664	197	14	777
Plow, Wheel .....	N. Rowen and G. Amis .....	204,612	June 4, 1878	188	60	13	1020
Plow, Wheel .....	W. H. Whittlesey and C. T. Noble .....	202,615	Apr. 16, 1878	819	237	13	718
Plow-wheel attachment .....	H. Gale .....	199,636	Jan. 23, 1878	982	285	13	185
Plows, Draft-adjuster for .....	W. A. Woodward .....	205,347	June 25, 1878	677	289	13	1125
Plows, Draft attachment for .....	M. Harris .....	201,777	Mar. 26, 1878	1066	307	12	579
Plows, Harrow attachment for .....	R. McCoy .....	209,348	Oct. 29, 1878	992	288	14	641
Plows, Harrow attachment for .....	J. M. McPike .....	201,684	Mar. 26, 1878	917	280	13	566
Plows, Harrow attachment for wheel .....	J. A. Wood .....	206,409	July 30, 1878	1100	314	14	14
Plows, Hiding attachment to .....	H. M. Freeman .....	203,027	Apr. 30, 1878	1276	369	13	789
Plows, Scraper attachment for shovel .....	H. D. Terrell .....	206,505	July 30, 1878	1203	345	14	177
Plows, Wheel attachment for .....	J. Clayton .....	203,420	May 7, 1878	192	55	13	847
Plow share or point .....	J. Long .....	207,752	Sept. 3, 1878	172	52	14	371
Plow shares and points, Manufacture of .....	C. M. French .....	206,707	Feb. 26, 1878	861	253	13	388
Plumbers' tack .....	H. C. Milligan .....	201,097	Mar. 26, 1878	919	261	13	556
Plumbers' traps, Bending .....	E. A. Leland .....	203,842	May 21, 1878	660	167	13	623
Plumbers' traps, Manufacture of .....	J. Robertson .....	206,829	Aug. 6, 1878	174	53	14	228
Pneumatic, hydraulic, or steam-pressure apparatus .....	J. W. Hyatt .....	200,914	Mar. 5, 1878	95	32	13	400
Pneumatic signaling apparatus .....	D. H. Iseminger .....	200,457	Feb. 19, 1878	585	173	13	339
Pocket .....	Y. Chow .....	201,565	Mar. 26, 1878	827	252	13	553
Pocket-book .....	M. Schupp .....	203,504	May 7, 1878	278	80	13	829
Pocket-book clasp .....	L. Prahar .....	202,755	Apr. 23, 1878	984	283	13	747
Pocket-book, &c., clasp .....	L. Wolf and M. Loeb .....	207,089	Aug. 15, 1878	445	137	14	265
Pocket-book, Coin .....	A. L. Thurston .....	202,486	Apr. 16, 1878	667	196	13	702
Pocket-book frame .....	C. Blust .....	194,778	Jan. 29, 1878	1113	327	13	205
Pocket-book frame .....	R. Debacher .....	210,759	Dec. 10, 1878	405	111	14	887
Pocket-book frame .....	D. M. Read and L. Prahan .....	200,340	Feb. 12, 1878	460	136	13	311
Pocket-book, Specie .....	G. W. Amesbury .....	200,962	Mar. 5, 1878	137	45	13	47
Pocket-case for pipe and tobacco .....	E. S. May .....	203,058	Apr. 30, 1878	1301	378	13	732
Pocket for garments .....	Y. Chow .....	204,199	May 28, 1878	1067	364	13	978
Pocket for garments .....	B. Greenbaum .....	204,723	June 11, 1878	312	95	13	1029
Pocket-knife .....	A. E. Elmer .....	194,936	Feb. 5, 1878	76	25	13	245
Pocket-knife .....	C. Luettich .....	200,551	Feb. 19, 1878	679	200	13	353
Pocket-knife .....	W. T. Whitehouse .....	199,766	Jan. 29, 1878	1102	324	13	284
Pocket-knife for opening cans .....	D. Martin .....	201,931	Apr. 2, 1878	70	19	13	669
Pocket or spring knife .....	W. Singleton and E. Priestman .....	199,868	Jan. 29, 1878	1198	352	13	218
Pocket pencil-knife .....	J. W. McGill .....	209,411	Oct. 29, 1878	1052	306	14	651
Pocket, Safety .....	W. V. Perry .....	198,753	Jan. 1, 1878	25	6	13	12
Poke, Animal .....	D. P. Randall .....	200,260	July 23, 1878	907	258	14	136
Poke, Animal .....	F. C. Whaley .....	209,844	Nov. 12, 1878	341	101	14	739
Pole and shaft, Wagon .....	F. Rice .....	207,304	Aug. 20, 1878	683	263	14	249
Pole-crab for vehicles .....	R. S. Grummon .....	199,152	Jan. 15, 1878	458	135	13	87
Pole for agricultural implements .....	L. B. Kenney .....	205,397	June 25, 1878	1049	311	13	1102
Pole-sweep for vehicles .....	J. Ives .....	192,911	Feb. 5, 1878	25	8	13	236
Pole tip, Vehicle .....	S. Maner .....	204,744	June 11, 1878	323	101	13	1062
Pole, Vehicle .....	B. H. Shear .....	210,568	Dec. 3, 1878	196	52	14	848
Policeman's club .....	J. Christmann .....	200,987	Mar. 5, 1878	102	53	13	440
Polishing-iron .....	W. W. Nixon .....	210,551	Dec. 3, 1878	174	46	14	846
Porous evaporator .....	W. Galloway .....	208,471	Oct. 1, 1878	18	5	14	491
Portable closet or commode .....	H. A. Lum .....	210,917	Dec. 17, 1878	602	166	14	919
Portable engine .....	E. Huber, J. C. Titus, E. Durfee, and J. F. Swinerton .....	205,867	July 9, 1878	449	128	14	70
Portable engine .....	C. M. and E. E. Miller .....	202,853	Apr. 23, 1878	1088	311	13	761
Portable furnace .....	L. R. Sassinet .....	210,272	Nov. 26, 1878	819	242	14	841
Portable heater .....	G. L. Thorne .....	204,862	June 11, 1878	459	134	13	1076
Portable house .....	J. Board .....	198,926	Jan. 8, 1878	217	61	13	40
Portable screen .....	S. W. Cornell .....	206,423	July 30, 1878	1114	318	14	106
Portfolio, Cabinet .....	J. D. Richards .....	200,477	Feb. 19, 1878	606	178	13	342
Post: .....							
See Fence-post. Hitching-post. .....							
Post-hole digger .....	C. Patterson .....	208,700	Oct. 8, 1878	329	93	14	540
Post-hole digger .....	M. Shutt .....	200,352	Feb. 12, 1878	474	140	13	314
Post-hole digger and transplanter .....	W. M. Ryan .....	209,837	Nov. 12, 1878	333	59	14	79
Post-office apparatus .....	G. W. Wiles .....	201,270	May 28, 1878	1123	324	13	967
Post-office box .....	W. H. Taylor .....	199,331	Jan. 15, 1878	634	185	13	115
Post-socket .....	S. Britt .....	206,731	July 30, 1878	1236	353	14	164
Postal card .....	F. W. Brooks .....	203,409	May 7, 1878	179	52	13	845
Postal card .....	M. Lee .....	200,067	Feb. 5, 1878	170	57	13	299
Postmarking and stamp-canceling machine .....	R. L. Grinnan .....	200,389	Feb. 19, 1878	521	154	13	329
Pot: .....							
See Coffee-pot. Glass-house pot. .....							
Fire-pot. Mustard-pot. .....							
Flower-pot. .....							
Pot-lid .....	W. Geary .....	204,810	June 11, 1878	406	119	13	1070



## Alphabetical list of inventions—Continued.

Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Potassium, Apparatus for the manufacture of ferro-cyanide of.	H. Bower .....	210,086	Nov. 19, 1878	609	181	14	770
Potato-bug catcher .....	W. D. Ensign .....	201,916	Apr. 2, 1878	58	15	13	607
Potato-bug catcher .....	C. P. Steinmetz .....	210,163	Nov. 19, 1878	689	205	14	781
Potato-bugs, Apparatus for gathering .....	A. Denison .....	206,776	Aug. 6, 1878	122	38	14	222
Potato-digger .....	S. L. Allen .....	208,008	Sept. 17, 1878	470	141	14	417
Potato-digger .....	F. W. Benjamin .....	209,641	Nov. 5, 1878	116	34	14	696
Potato-digger .....	C. W. Green and M. T. Howland .....	207,175	Aug. 20, 1878	549	{ 164 165 }	14	282
Potato-digger .....	S. Hartshorne .....	199,063	Jan. 8, 1878	350	103	13	71
Potato-digger .....	C. P. Higgins .....	206,568	July 30, 1878	1260	265	14	185
Potato-digger .....	S. Love .....	208,747	Oct. 8, 1878	311	89	14	538
Potato-digger .....	H. C. Miner .....	205,481	May 7, 1878	258	75	13	856
Potato-digger .....	D. B. Muchmore .....	208,888	Apr. 2, 1878	29	8	13	603
Potato-digger .....	W. Schwarz .....	201,894	Apr. 2, 1878	35	10	13	604
Potato-digger .....	C. O. Seamans .....	200,769	Feb. 26, 1878	917	270	13	397
Potato-digger .....	A. N. Smiley .....	205,310	June 25, 1878	956	283	13	1151
Potato-digger .....	H. Strait .....	210,061	Nov. 19, 1878	550	174	14	706
Potato-digger .....	J. C. Webster .....	206,652	July 30, 1878	1357	590	14	195
Potato-fork, Horse .....	G. C. Clark .....	201,652	Mar. 26, 1878	883	269	13	560
Potato-separator .....	W. W. Davis and F. P. Wilson .....	206,544	July 30, 1878	1237	556	14	181
Potato-skins, Removing .....	A. R. Davis .....	206,934	Aug. 13, 1878	360	91	14	247
Potato-slicer .....	A. Harrington .....	204,895	June 18, 1878	520	152	13	1088
Pottery, glass, &c., vessels, Detachable metallic cover for.	S. M. Laughlin .....	210,042	Nov. 19, 1878	561	168	14	763
Pottery-kiln .....	I. and G. Marsh .....	199,080	Jan. 8, 1878	366	108	13	74
Pottery-ware, Machine for forming .....	C. Breitschwerth and J. B. Hughes .....	201,907	Apr. 2, 1878	48	13	13	606
Powder:							
See Baking-powder.	Cannon-powder.						
Blasting-powder.	Medical powder.						
Power:							
See Churn-power.	Motive power.						
Dog-power.	Treadle-power.						
Foot-power.	Water-power.						
Horse-power.	Wave-power.						
Hydraulic power.	Windmill-power.						
Power and motion, Apparatus for transmitting .....	C. L. Heurich .....	206,018	July 16, 1878	620	179	14	96
Power, Apparatus for transferring .....	J. W. Hawley .....	204,568	June 4, 1878	135	45, 46	13	1032
Power, Device for driving light machinery from an irregular.	M. Everhart .....	201,899	Mar. 19, 1878	613	187	13	518
Power, Device for transmitting .....	W. C. Baker .....	208,055	Sept. 17, 1878	519	155	14	423
Power, Device for transmitting .....	J. F. Haskins .....	201,178	Mar. 12, 1878	359	111	13	476
Power-press .....	J. L. Lewis .....	204,158	May 28, 1878	1018	289	13	972
Power, Support for ropes for transmitting .....	G. H. Reynolds .....	208,850	Oct. 8, 1878	428	124	14	554
Precious stones, shells, &c., Cutting .....	T. Peiter .....	203,641	May 14, 1878	436	.....	13	887
Preserve and fruit jar .....	L. P. Whiteman .....	201,069	Apr. 2, 1878	105	31	13	614
Preserve jar and can .....	H. Blackburn .....	205,469	July 2, 1878	7	2	14	10
Preserving fish, meat, &c. ....	S. Bliss .....	205,830	July 9, 1878	413	.....	14	65
Preserving food, Apparatus for .....	E. P. Bates .....	202,979	Apr. 30, 1878	1229	355	13	783
Preserving food, Apparatus for .....	P. P. E. M. Koch .....	208,743	Oct. 8, 1878	308	88	14	537
Preserving food, Compound for .....	R. S. Dashiell .....	208,159	Sept. 17, 1878	629	.....	14	438
Preserving food, Process and compound for .....	H. M. Jeter .....	203,737	May 14, 1878	538	.....	13	900
Preserving juices of green corn .....	J. H. Oliver .....	200,150	Feb. 12, 1878	268	80	13	283
Preserving together cured fish and potatoes .....	S. Rich .....	201,834	Mar. 26, 1878	1062	.....	13	587
Press:							
See Baling-press.	Hay and cotton press.						
Bookbinder's dry-press.	Hot-press.						
Brick-press.	Household press.						
Brick and concrete-block press.	Hydraulic press.						
Broom-press.	Lard and fruit press.						
Butter-press.	Lever-press.						
Cheese-press.	Oil-press.						
Cigar-packer press.	Power-press.						
Copying-press.	Printing-press.						
Cotton-press.	Punching-press.						
Fuel-press.	Seal-press.						
Glass-press.	Shingle-press.						
Hay-press.	Steam and hydraulic press.						
	Tobacco-press.						
	Wool-press.						
Press .....	S. R. Bartlett .....	198,834	Jan. 1, 1878	111	32	13	26
Press .....	H. Froese .....	206,554	July 30, 1878	1251	360	14	183
Press for extracting water from starch, &c. ....	H. W. Scholler .....	204,918	June 18, 1878	544	158	13	1091
Pressing and molding substances into blocks, Machine for.	W. Münzer .....	203,362	May 7, 1878	130	38	13	838
Pressing and rolling plastic material, Machine for .....	T. Hagerty .....	211,009	Dec. 17, 1878	705	194	14	931
Pressure-gage indicator .....	J. E. Treat .....	201,637	Mar. 26, 1878	871	265	13	558
Pressure-gage, Steam .....	O. W. Bayley .....	199,953	Feb. 5, 1878	64	21	13	243
Pressure-gage, Steam-boiler .....	J. Helwig .....	199,157	Jan. 15, 1878	463	137	13	78
Pressure-indicator for steam-engines .....	J. Rae .....	204,086	May 21, 1878	919	263	13	956
Pressure-regulator .....	W. D. Dickey .....	203,124	Apr. 30, 1878	1365	398	13	801
Pressure-regulator, Automatic .....	J. J. Kennevan .....	206,248	July 23, 1878	891	254	14	134
Pressure-regulator, Differential .....	S. A. Hand .....	201,243	Mar. 12, 1878	430	132	13	486
Pressure-regulator or governor .....	R. M. Potter and W. M. Sloane .....	209,192	Oct. 22, 1878	829	239	14	615
Printer's chase .....	S. Crump .....	206,541	July 30, 1878	1235	355	14	181
Printer's chase .....	W. K. Everdell .....	206,427	July 30, 1878	1119	320	14	166
Printer's chases, Milling-machine for dressing .....	R. W. Hartnett .....	201,780	Mar. 26, 1878	1008	308	13	579
Printer's composing-stick .....	H. C. Fenton .....	198,913	Jan. 1, 1878	197	56	13	39
Printer's composing-stick .....	O. F. Grover .....	204,432	June 4, 1878	17	6	13	1015
Printer's distributing-galley .....	H. G. Wilson .....	201,971	Apr. 2, 1878	108	32	13	615
Printer's galley .....	M. McCabe .....	209,497	Oct. 29, 1878	1144	333	14	664
Printer's galley .....	J. W. Munday .....	201,819	Mar. 26, 1878	1044	319	13	584
Printer's galley .....	W. T. Tillinghast .....	208,348	Sept. 24, 1878	842	245	14	468
Printer's galley .....	S. D. Tucker .....	211,068	Dec. 17, 1878	784	215	14	940

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				Spec.	Dr. & G.	Vol.	Page.
Printer's inking-roller, Composition for.	A. Van Bibber.	202, 897	Apr. 23, 1878	1136	.....	13	766
Printer's measuring-scale.	W. G. Perris.	204, 601	June 4, 1878	174	56	13	1857
Printer's quoin.	H. A. Hempel.	204, 820	June 11, 1878	415	122	13	1871
Printer's quoin.	G. D. Whittlesey.	201, 075	Mar. 5, 1878	253	80	13	453
Printer's rules and leads, Machine for cutting.	W. H. Golding.	206, 781	Aug. 6, 1878	126	40	14	223
Printing and cutting fabrics, Machine for.	W. D. Grimshaw.	209, 674	Nov. 5, 1878	153	44, 45	14	761
Printing and painting machine.	O. Currier.	208, 892	Oct. 15, 1878	481	{ 138 139 }	14	864
Printing and recording machine, Ticket.	J. Moss, J. H. Smith, and G. J. Hill.	209, 827	Nov. 12, 1878	321	95, 96	14	727
Printing apparatus, Traveling.	K. Gray.	200, 711	Feb. 26, 1878	865	254	13	380
Printing attachment for paper-ruling machines.	J. E. Taylor.	199, 003	Jan. 8, 1878	294	86	13	61
Printing, Autographic.	J. Pumphrey.	200, 759	Feb. 26, 1878	910		13	366
Printing block, Chromatic.	T. D. Osborne.	203, 490	May 7, 1878	267	77	13	357
Printing machine, Block.	A. F. Buchanan.	207, 490	Aug. 27, 1878	892	203	14	389
Printing machine, Can.	W. R. Norris.	210, 552	Dec. 3, 1878	175	40, 47	14	646
Printing-machine, Cylinder.	E. Prouty.	206, 826	Aug. 6, 1878	171	54	14	223
Printing-machine delivery apparatus.	C. B. Cottrell.	208, 796	Oct. 8, 1878	367	{ 104 105 }	14	545
Printing-machine, Electro-magnetic.	G. Hillen and J. Crockett.	202, 650	Apr. 23, 1878	876	251	13	734
Printing-machine inking apparatus.	J. F. Hubbard.	205, 189	June 25, 1878	826	245	13	1132
Printing machine, Plate.	C. A. Guy.	210, 110	Nov. 19, 1878	641	190	14	774
Printing machine, Plate.	T. C. Kenworthy and A. McGregor.	203, 465	May 7, 1878	241	60, 70	13	582
Printing-machine, Rotary.	G. Newsom.	200, 927	Mar. 5, 1878	100	36	13	432
Printing-machine, Rotary.	G. Rosquist.	201, 558	Mar. 10, 1878	770	234	13	540
Printing machine, Spool.	M. W. Brush and J. J. Hartnett.	205, 173	June 25, 1878	810	241	13	1121
Printing-machines, Griper-motion for.	N. Babcock.	208, 359	Sept. 24, 1878	853	248	14	600
Printing-machines, Griper-motion for.	G. Preston.	206, 131	July 16, 1878	744	{ 213 214 }	14	111
Printing-machines, Inking apparatus for.	C. H. Bacon.	207, 934	Sept. 10, 1878	379	115	14	600
Printing-machines, Sheet-delivering apparatus for.	C. B. Cottrell.	203, 710	May 14, 1878	511	145	13	397
Printing-machines, Sheet-delivery apparatus for.	C. B. Cottrell.	203, 709	May 14, 1878	510	145	13	396
Printing, Photo-mechanical.	M. R. Freeman.	209, 036	Oct. 15, 1878	440		14	585
Printing, Photo-mechanical.	J. B. Obernetter.	208, 114	Sept. 17, 1878	575		14	431
Printing pills, Machine for.	W. B. Warner.	200, 589	Feb. 19, 1878	715	210	13	359
Printing, Preparing transfer-sheets or matrices for.	C. T. Moore.	201, 436	Mar. 19, 1878	647	197	13	823
Printing-press.	J. Burrell.	207, 499	Aug. 27, 1878	900	265	14	331
Printing-press.	A. Campbell.	201, 226	Mar. 12, 1878	408	{ 123 124 }	13	483
Printing-press.	C. B. Cottrell.	205, 357	June 25, 1878	1008	298	13	1157
Printing-press.	G. T. Frazee.	201, 770	Mar. 26, 1878	968	305	13	573
Printing-press.	E. L. Gilman.	203, 345	May 7, 1878	103	80	14	334
Printing-press.	W. H. Golding.	209, 827	Mar. 5, 1878	12	4, 5	13	417
Printing-press.	W. A. Lavalette.	208, 154	Sept. 17, 1878	655	193	14	611
Printing-press.	H. A. Manley.	203, 171	Apr. 30, 1878	1421	415	13	896
Printing-press.	W. F. Rosser and J. L. Briggs.	206, 972	Aug. 13, 1878	333	102	14	251
Printing press, Plate.	W. S. Appleton.	210, 741	Dec. 10, 1878	898	106	14	683
Printing press, Ticket.	T. B. Jaffrey.	209, 762	Nov. 12, 1878	255	70, 77	14	719
Printing-presses, Inking apparatus for.	W. P. Kidder.	204, 960	June 18, 1878	524	153	13	1063
Printing-presses, Sheet-delivery apparatus for.	J. Hird.	209, 083	Nov. 5, 1878	159	47	14	732
Printing-surfaces, Composition for supporting metallic plates for the formation of.	J. Brown.	204, 795	June 11, 1878	391	.....	13	1063
Printing-surfaces, Producing.	J. P. Jamison.	198, 847	Jan. 1, 1878	125	36	13	28
Printing tickets and recording cash receipts, Device for.	B. C. Polo.	198, 855	Jan. 1, 1878	133	38	13	30
Prison-lock.	H. R. Towne and T. F. Keating.	200, 156	Feb. 12, 1878	275	83	13	294
Projectile for heavy guns.	R. Haddfield.	199, 973	Feb. 5, 1878	82	27	13	246
Projectile for throwing lines.	S. Eggers and E. Pierce.	208, 724	Oct. 8, 1878	286	83	14	635
Propeller-blades, Reversing.	C. M. Bailey.	202, 396	Apr. 16, 1878	581	171	13	889
Propeller, Chain-wheel.	L. Alvord.	209, 541	Nov. 5, 1878	2	1	14	991
Propeller, Endless-chain.	H. Exall.	206, 551	July 30, 1878	1244	358	14	183
Propeller, Endless-chain.	J. Goodrich.	210, 685	Dec. 10, 1878	331	90	14	675
Propeller for vessels, Atmospheric.	T. H. Neal.	201, 119	Mar. 12, 1878	306	92	13	468
Propeller, Screw.	R. H. Armit.	210, 982	Dec. 17, 1878	675	198	14	927
Propeller, Screw.	J. C. Capern.	201, 650	Mar. 26, 1878	882	268	13	580
Propeller, Screw.	M. Chase.	205, 053	June 18, 1878	675	198	12	1168
Propeller, Screw.	E. C. Hubbard.	211, 016	Dec. 17, 1878	713	198	14	953
Propeller, Screw.	E. J. Hulbert.	199, 549	Jan. 22, 1878	804	253	13	120
Propeller, Screw.	E. J. Hulbert.	199, 550	Jan. 22, 1878	865	253	13	150
Propeller, Screw.	W. S. Hull.	204, 575	June 4, 1878	142	47	13	1223
Propeller, Screw.	S. T. Swasey.	208, 211	Sept. 17, 1878	681	200	14	444
Propeller, Screw.	E. Town.	199, 126	Jan. 8, 1878	418	123	13	81
Propeller, Screw.	S. Tragheim.	200, 951	Mar. 5, 1878	127	42	12	636
Propeller, Steering.	T. F. Levens.	199, 985	Feb. 5, 1878	94	81	13	247
Propellers, Bearing for screw.	J. Baird.	203, 875	May 21, 1878	691	{ 197 198 }	13	927
Propelling boats.	T. Fetherston.	198, 933	Jan. 8, 1878	224	63	13	50
Propelling vessels.	P. Boisset.	208, 932	Oct. 15, 1878	551	161	14	573
Propelling vessels.	S. H. Cowles and B. B. Brewer.	207, 018	Aug. 13, 1878	379	116	14	257
Protector:							
See Book-cover protector.	Horse-tail protector.						
Boot and shoe sole protector.	Pantaloon protector.						
Cigar-tip protector.	Shaft-lug protector.						
Cigar-tuck protector.	Sheep-protector.						
Face-protector.	Sleeve-protector.						
Fruit-jar protector.	Strawberry-protector.						
Hand-protector.	Tobacco-quid protector.						
Head-protector.	Tree-protector.						
Head-protector.	Wall-protector.						
Pruning implement.	W. R. Rose.	209, 587	Nov. 5, 1878	50	15	14	694
Pruning-knife.	J. M. Holck.	201, 782	Mar. 26, 1878	1011	309	13	580
Pruning-knife.	E. Hixson.	199, 065	Jan. 8, 1878	352	104	13	71
Pruning-shears.	J. W. Weymouth.	202, 496	Apr. 16, 1878	470	198	13	703

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Pruning-shears .....	J. Wilz .....	202,499	Apr. 16, 1878	679	199	13	703
Psychrometer .....	N. M. Lowe .....	202,276	Apr. 9, 1878	444	129	13	665
Puddling and balling furnace .....	T. Gidlow and J. Abbott .....	203,724	May 14, 1878	524	148	13	898
Puddling-furnace .....	W. L. McNair .....	207,669	Sept. 3, 1878	86	26	14	360
Puller:							
<i>See</i> Stalk-puller.                      Stump-puller.							
Pulley .....	G. Taylor .....	209,147	Oct. 22, 1878	782	227	14	609
Pulley apparatus, Screw-hoisting .....	A. Box .....	199,955	Feb. 5, 1878	66	21	13	243
Pulley, Awning .....	D. Jannopoulos .....	210,855	Dec. 17, 1878	516	146	14	908
Pulley, Belt .....	P. Medart .....	199,848	Jan. 20, 1878	1183	347	13	216
Pulley, Belt-shipping .....	J. J. White .....	204,929	June 18, 1878	557	162	13	1092
Pulley-block .....	E. B. Beach .....	199,400	Jan. 22, 1878	714	210	13	135
Pulley-block, Safety .....	J. R. Weston .....	210,281	Nov. 26, 1878	829	{ 244 245 }	14	802
Pulley-block, Self-binding .....	W. F. Hurrell, jr .....	201,612	Mar. 26, 1878	844	256	13	554
Pulley, Door and Gate .....	H. T. Gates .....	209,966	Nov. 19, 1878	480	145	14	752
Pulley for window-sashes .....	H. A. Wilbur .....	209,907	Nov. 19, 1878	513	155	14	757
Pulley frame, Sash .....	O. S. Garretson .....	205,184	June 25, 1878	822	244	13	1133
Pulley, Loose .....	J. Salter, jr .....	202,607	Apr. 23, 1878	894	256	13	736
Pulley lubricator, Loose .....	W. G. Beach .....	201,487	Mar. 19, 1878	696	212	13	530
Pulley, Sash .....	E. H. N. Clarkson and W. H. H. Kesler .....	201,749	Mar. 26, 1878	374	298	13	574
Pulley, Sash .....	B. D. Washburn .....	204,468	June 4, 1878	51	16	13	1019
Pulleys, Friction-clutch for loose and tight .....	J. B. Warner .....	202,312	Apr. 9, 1878	479	140	13	671
Pulleys to wheels, Device for engaging .....	R. Blake and S. A. Davis .....	208,884	Oct. 15, 1878	471	135	14	563
Pulp-grinding machine .....	J. W. Brightman .....	202,698	Apr. 23, 1878	926	{ 264 265 }	13	740
Pulping machine, Wood .....	F. A. Cushman .....	201,501	Mar. 19, 1878	710	216	13	533
Pulverizer, Soil .....	S. McCollm .....	204,988	June 18, 1878	611	179	13	1100
Pulverizing apparatus .....	H. Bolthoff .....	204,945	June 18, 1878	571	167	13	1095
Pulverizing-barrel .....	J. C. Sanderling .....	210,471	Dec. 3, 1878	85	21	14	835
Pulverizing-machine .....	H. B. Moore .....	198,993	Jan. 8, 1878	286	83	13	60
Pulverizing-machine .....	H. B. Moore .....	198,994	Jan. 8, 1878	287	84	13	60
Pulverizing-mill .....	J. W. Hyatt .....	201,347	Mar. 19, 1878	558	{ 171 172 }	13	511
Pump .....	J. S. Adams .....	207,700	Sept. 3, 1878	114	34, 35	14	363
Pump .....	A. H. Ashley .....	208,054	Sept. 17, 1878	518	154	14	423
Pump .....	A. S. Baker .....	204,280	May 28, 1878	1142	327	13	988
Pump .....	J. S. Beal .....	203,814	May 21, 1878	633	178	13	919
Pump .....	R. Bean .....	201,734	Mar. 26, 1878	961	294	13	572
Pump .....	G. A. Beeman and J. T. Mason .....	208,285	Sept. 24, 1878	778	227	14	459
Pump .....	H. Berg .....	202,512	Apr. 16, 1878	691	203	13	705
Pump .....	W. Burlingham .....	201,909	Apr. 2, 1878	51	14	16	606
Pump .....	H. Cadwalader .....	207,592	Sept. 3, 1878	9	3	14	350
Pump .....	W. Clough .....	209,549	Nov. 5, 1878	12	4	14	682
Pump .....	S. M. Cole .....	203,421	May 7, 1878	193	56	13	847
Pump .....	W. S. Davis .....	201,164	Mar. 12, 1878	347	107	13	474
Pump .....	C. H. Duwelius and H. Crivel .....	204,958	June 18, 1878	583	171	13	1096
Pump .....	S. B. Elzey .....	200,185	Feb. 12, 1878	304	91	13	288
Pump .....	J. T. Fanning .....	208,301	Sept. 24, 1878	793	231	14	462
Pump .....	P. H. Green .....	210,935	Dec. 17, 1878	621	172	14	921
Pump .....	J. M. Grillenberger .....	209,673	Nov. 5, 1878	152	44	14	701
Pump .....	E. Hawkes .....	206,728	Aug. 6, 1878	72	23	14	215
Pump .....	F. A. Helmecke .....	206,448	July 30, 1878	1140	327	14	169
Pump .....	J. F. Hess .....	210,122	Nov. 19, 1878	647	192	14	775
Pump .....	S. N. Jones .....	208,739	Oct. 8, 1878	302	86	14	537
Pump .....	W. S. Laney .....	202,178	Apr. 9, 1878	345	101	13	652
Pump .....	A. Lucasso and J. A. Newell .....	202,659	Apr. 23, 1878	884	254	13	735
Pump .....	W. C. Nelson .....	210,802	Dec. 10, 1878	451	127	14	891
Pump .....	J. W. Palmer .....	202,577	Apr. 16, 1878	779	224	13	714
Pump .....	S. Peterson .....	209,510	Oct. 29, 1878	1160	337	14	666
Pump .....	W. H. Peterson .....	207,891	Sept. 10, 1878	335	100	14	394
Pump .....	A. B. Prouty .....	209,513	Oct. 29, 1878	1163	338	14	666
Pump .....	J. S. Putnam .....	207,893	Sept. 10, 1878	336	101	14	394
Pump .....	C. F. and S. Rigby, 3d .....	206,970	Aug. 13, 1878	331	101	14	251
Pump .....	E. Sanders .....	210,055	Nov. 19, 1878	573	172	14	765
Pump .....	F. Shollar .....	201,048	July 16, 1878	650	189	14	100
Pump .....	W. W. Stetson .....	206,496	July 30, 1878	1195	343	14	175
Pump .....	J. J. Sturt .....	199,596	Jan. 22, 1878	911	267	13	167
Pump .....	S. Stucky .....	209,086	Oct. 15, 1878	698	202	14	593
Pump .....	J. C. Titus .....	210,169	Nov. 19, 1878	697	207	14	782
Pump .....	J. W. Tuck .....	205,926	July 9, 1878	515	146	14	78
Pump .....	W. M. Whiteley .....	205,935	July 9, 1878	523	149	14	79
Pump .....	J. A. Whitman .....	199,131	Jan. 8, 1878	422	124	13	81
Pump .....	J. M. Willis .....	200,782	Feb. 26, 1878	930	273	13	399
Pump .....	A. S. Wright .....	198,136	Jan. 8, 1878	427	125	13	82
Pump, Air .....	W. S. Burgess .....	200,026	Feb. 5, 1878	131	43	13	254
Pump, Ammoniacal-gas .....	J. Enright .....	202,641	Apr. 23, 1878	866	248	13	733
Pump and check valve, Compressible .....	A. W. Johnson .....	201,880	Apr. 2, 1878	23	6	13	602
Pump and condenser for motive-power engines, &c. .....	R. M. Marchant .....	201,542	Mar. 19, 1878	754	230	13	538
Pump and measuring-faucet combined .....	S. M. Cawker .....	198,969	Jan. 8, 1878	260	74	13	56
Pump and windlass, Combined ship's .....	L. H. Lyon .....	206,895	Aug. 6, 1878	150	47	14	225
Pump, Beer .....	E. Stewart .....	201,846	Mar. 26, 1878	1073	{ 326 327 }	13	588
Pump, Bucket .....	J. M. Fate .....	208,080	Sept. 17, 1878	540	161	14	426
Pump bucket, Chain .....	M. C. Bignall .....	203,854	Aug. 13, 1878	217	70	14	237
Pump bucket, Chain .....	E. White .....	205,819	July 9, 1878	402	115	14	63
Pump, Cattle .....	E. Taylor .....	207,458	Aug. 27, 1878	858	233	14	326
Pump, Centrifugal .....	C. Chadwick .....	204,535	June 4, 1878	105	35	13	1027
Pump, Chain .....	G. B. Valentine .....	202,896	Apr. 23, 1878	1135	326	13	766
Pump-chains, Machine for making .....	J. Adt .....	206,995	Aug. 13, 1878	356	109	14	254
Pump, Combined suction and force .....	N. J. Tubbs and J. Wagner .....	205,700	July 2, 1878	254	76	14	41
Pump, Cream .....	G. A. Baron .....	202,778	Apr. 23, 1878	1004	289	13	750
Pump, Detritus .....	E. Moreau .....	207,887	Sept. 11, 1878	326	99	14	394
Pump, Double-acting .....	C. Heister .....	202,725	Apr. 23, 1878	949	272	13	743

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				Spec.	Dr. g.	Vol.	Page.
Pump, Double-acting	H. J. and L. C. Humphrey	204, 973	June 18, 1878	597	174	13	1066
Pump, Double-acting	J. A. Sinclair	207, 561	Aug. 27, 1878	972	285	14	240
Pump, Double-acting	J. G. Wolf	206, 635	July 30, 1878	1359	390	14	106
Pump, Double-acting force	G. H. Patch	209, 507	Oct. 20, 1878	1155	336	14	605
Pump, Double-acting force	C. Schmidt	205, 668	July 2, 1878	240	71, 72	14	30
Pump, Double-acting force	E. L. Spencer	210, 058	Nov. 19, 1878	576	173	14	765
Pump, Double-acting lift	A. H. Lean and A. C. Pike	209, 027	Oct. 15, 1878	631	183	14	584
Pump, Direct-acting steam	W. Craig	208, 757	Oct. 8, 1878	369	105	14	545
Pump, Double-acting steam	A. F. Hall	199, 288	Jan. 15, 1878	590	172	13	108
Pump, Double-acting suction and force	N. Clute	202, 633	Apr. 23, 1878	856	246	13	723
Pump, Double-action	C. A. Carr	205, 032	June 18, 1878	675	193	13	1366
Pump for ice and refrigerating machines	J. C. Mack	210, 134	Nov. 19, 1878	659	196	14	777
Pump for oil-wells, Steam	H. W. Faucett	204, 015	May 21, 1878	847	242	13	947
Pump, Force	O. K. McIntire	208, 192	Sept. 17, 1878	660	194	14	443
Pump, Force	W. F. Raymond	199, 380	Jan. 22, 1878	692	203	13	132
Pump governor, Steam	C. A. Sellon	200, 350	Feb. 12, 1878	472	139	13	314
Pump, Hand	J. M. Holland	206, 451	July 30, 1878	1143	328	14	169
Pump-handle	J. Chegwidden	205, 526	July 2, 1878	66	19	14	17
Pump, Lift	J. E. Leonard	206, 587	July 30, 1878	1287	370	14	157
Pump, Lift	W. London	207, 536	Aug. 27, 1878	943	277	14	236
Pump, Lift and force	N. Malmquist	200, 923	Mar. 5, 1878	103	35	13	431
Pump, Lifting and force	T. B. Swan	205, 699	July 2, 1878	254	76	14	40
Pump, Lubricating	E. G. Felthousen	199, 428	Jan. 22, 1878	738	217	13	139
Pump, Measuring	T. R. Vestal	200, 060	July 18, 1878	664	192	14	162
Pump, Oil	C. McCarthy and C. Giles	202, 565	Apr. 16, 1878	765	221	13	712
Pump, Oil-well	F. Bowen	208, 709	Oct. 8, 1878	271	77	14	583
Pump, Oil-well	F. J. Hanna	209, 258	Oct. 22, 1878	887	250	14	604
Pump, Oil-well	M. Lytle	206, 888	Aug. 13, 1878	258	79	14	243
Pump, Oil-well	M. Lytle	206, 956	Aug. 13, 1878	319	97	14	246
Pump, Oscillating	P. A. Clark	199, 792	Jan. 29, 1878	1130	322	13	966
Pump-plunger	J. Knouse	199, 074	Jan. 8, 1878	390	106	13	71
Pump-plunger	A. A. Lamb	208, 404	Sept. 24, 1878	894	261	14	495
Pump reel for deep wells, Sand	D. C. Brawley and W. H. H. Morris	200, 687	Feb. 26, 1878	838	247	13	365
Pump reel, Sand	M. B. McManus	198, 774	Jan. 1, 1878	53	14	13	16
Pump-regulating valve	J. H. Blessing	207, 483	Aug. 27, 1878	881	260	14	629
Pump-regulating valve	J. H. Blessing	207, 485	Aug. 27, 1878	886	261	14	630
Pump-rod attachment for deep wells	V. C. Gilmore	203, 260	May 7, 1878	25	8	13	394
Pump, Rotary	H. A. and T. Barber	206, 698	Aug. 6, 1878	43	13	14	512
Pump, Rotary	A. Noteman	199, 737	Jan. 29, 1878	1075	315	13	139
Pump, Ship's	J. Edson	201, 336	Mar. 19, 1878	546	169	13	606
Pump, Ship's	S. C. Loud	208, 529	Oct. 1, 1878	73	22	14	496
Pump-spouts, faucets, &c., Discharge-pipe for	T. Dowling	208, 722	Oct. 8, 1878	283	81	14	594
Pump, Steam	J. A. Burnap	207, 590	Sept. 3, 1878	6	3	14	595
Pump, Steam	J. Evans	200, 035	Feb. 5, 1878	140	46	13	255
Pump, Steam	M. Schultz	204, 619	June 4, 1878	199	63	13	1040
Pump, Steam	P. Van Tassel and M. Paup	207, 226	Aug. 20, 1878	603	181	14	290
Pump, Steam-jet	H. P. Tennant	206, 054	July 16, 1878	659	190	14	101
Pump, Steam vacuum	D. M. Terry	200, 881	Mar. 5, 1878	66	23	13	426
Pump, Stock	S. R. King	205, 800	July 9, 1878	380	109	14	6
Pump, Stomach and enema	E. Rosenzi	207, 072	Aug. 13, 1878	429	136	14	263
Pump, Submerged	B. J. C. Howe	204, 896	June 18, 1878	521	152	13	1068
Pump suction-pipe	E. O. Leermo	201, 689	Mar. 26, 1878	913	279	13	365
Pump-valve	E. Hawkes	210, 691	Dec. 10, 1878	335	93	14	576
Pump-valve	W. L. Miller	205, 566	July 2, 1878	110	33	14	33
Pump-valve	J. J. Tonkin	209, 525	Oct. 29, 1878	1170	341	14	608
Pump-valve	J. Tregoning and M. Hastings	201, 468	Mar. 19, 1878	678	207	13	267
Pump-valve	J. Watson	207, 784	Sept. 3, 1878	203	63	14	594
Pump-valve	A. W. White	202, 128	Apr. 9, 1878	200	65	13	964
Pump valve, Beer	J. A. Prindle	206, 825	Aug. 6, 1878	170	54	14	237
Pump-valve, Metallic	W. Ap. Williams	209, 740	Nov. 5, 1878	223	67	14	711
Pump, Vertical steam	H. A. Jamieson and W. Foster	206, 457	July 30, 1878	1152	330	14	139
Pumps, Air-filter for beer	J. C. A. Rohde	199, 577	Jan. 22, 1878	889	261	13	366
Pumps, Link for chain	S. W. Kershner	208, 608	Oct. 1, 1878	153	45	14	260
Pumps, &c., Metallic bucket for chain	S. W. Kershner	208, 609	Oct. 1, 1878	153	45	14	260
Pumps, Motor for operating	J. W. Law	203, 280	May 7, 1878	45	14	13	395
Pumps, Piston for oil-well	J. B. Potter	210, 710	Dec. 10, 1878	354	97	14	575
Pumps, Rod-clamping device for walking-beams of oil	W. B. Tracy	207, 969	Sept. 10, 1878	446	134	14	601
Pumps, Suction-pipe for	E. O. Lermo	208, 617	Oct. 1, 1878	160	47	14	591
Pumps, Working-barrel for oil	C. E. Weible	201, 853	Mar. 26, 1878	1080	326	13	939
Pumping apparatus for oil-wells	C. Snyder	203, 206	Apr. 30, 1878	1458	426	13	602
Pumping apparatus for raising water	F. A. Bishop	209, 323	Oct. 29, 1878	965	281	14	606
Pumping-engine	J. H. Vailo	203, 511	May 7, 1878	287	83	13	426
Pumping-engine, Steam	G. F. Blake	200, 890	Mar. 5, 1878	73	25, 26	13	365
Pumping-engine, Steam	W. C. Heister	204, 433	June 4, 1878	18	7	13	965
Pumping-machine	A. H. Low	202, 841	Apr. 23, 1878	1078	308	13	1000
Pumping system, Hydraulic and wire-rope	W. P. Barclay	208, 704	Oct. 8, 1878	266	76	14	575
Punch for cutting letters	J. A. Hitter, Jr.	199, 710	Jan. 29, 1878	1053	286	13	606
Punch, Metal	S. H. Jenkins	193, 715	Jan. 29, 1878	1057	300	13	606
Punch, Portable hand	M. L. Gutmann	199, 060	Jan. 8, 1878	348	101	13	366
Punch, Railway conductor's alarm and fare-registering	R. McCully	200, 077	Feb. 5, 1878	190	60	13	366
Punch, Ticket	W. H. Pickford	207, 981	Sept. 10, 1878	426	129	14	575
Punching-machine	W. Krutzsch	206, 026	July 16, 1878	627	181	14	575
Punching-press	W. E. Brooke	205, 907	July 10, 1878	609	173	14	54
Punching sheet-metal tubing, Machine for	E. O. Higgins	200, 454	Feb. 10, 1878	583	172	13	328
Punkas, Apparatus for working	R. C. Parsons and E. Palliser	206, 895	Aug. 13, 1878	265	81	14	243
Purse	A. Vogel	203, 678	May 14, 1878	475	135	13	882
Puzzle, Specie	J. C. Rundlett	201, 201	Mar. 12, 1878	381	118	13	480
Puzzle-block	E. U. Kinsey	207, 124	Aug. 20, 1878	500	150	14	276
Pyrite-burning furnace	J. Hughes	199, 069	Jan. 8, 1878	355	105	13	72
Pyrites, Treating burnt	J. Mason	210, 619	Dec. 10, 1878	261	172	14	567

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Q.							
Quicksilver-furnace	R. F. Knox	202, 274	Apr. 9, 1878	441	128	13	665
Quilting-frame	W. E. Barker	207, 000	Aug. 13, 1878	363	111	14	254
Quilting-frame	B. Elliott	208, 577	Oct. 1, 1878	125	36	14	506
Quilting-machine	J. J. Crall	206, 004	July 16, 1878	608	175	14	95
R.							
Rack:							
<i>See</i> Book-rack.	Milk and provision rack.						
Broom-rack.	Sheep-rack.						
Clothes-rack.	Spool-rack.						
Hay-rack.	Towel-rack.						
Horse-rack.	Wagon-rack.						
Hose-rack.	Whip-rack.						
Radiator	W. F. Cunningham	199, 799	Jan. 29, 1878	1137	334	13	209
Radiator, Heat	J. N. Farnham	210, 453	Dec. 3, 1878	67	17	14	833
Radiator, Hot-air	W. Parks and G. M. Allen	206, 403	July 30, 1878	1094	313	14	163
Radiator, Steam	W. H. Brown	199, 257	Jan. 15, 1878	556	163	13	103
Radiator, Steam	W. H. Brown	200, 001	Feb. 26, 1878	746	219	13	371
Radiator, Steam	W. H. Brown	201, 091	Mar. 12, 1878	274	85	13	464
Radiator, Steam	J. H. Cunningham	200, 983	Mar. 5, 1878	158	52	13	440
Radiator, Steam	T. W. H. Moseley	204, 445	June 4, 1878	30	10	13	1017
Radiator, Steam	J. R. Reed	202, 192	Apr. 9, 1878	358	105	13	653
Radiator, &c., Steam-heat	P. Mihan	205, 604	July 2, 1878	215	64	14	36
Radiator-valve	W. H. Meredith	207, 540	Aug. 27, 1878	948	278	14	337
Radiation of heat, Compound for preventing	P. Strelitz	210, 060	Nov. 19, 1878	579		14	766
Rafter	F. M. Covert	209, 024	Oct. 15, 1878	628	182	14	583
Rafting-boom	L. W. Pond	203, 558	May 14, 1878	361	102	13	878
Rag-pickers, &c., Lag for	J. H. Belser and S. G. B. Beals	209, 376	Oct. 29, 1878	1022	297	14	646
Rail-chair	J. R. Neff	210, 705	Dec. 10, 1878	348	95	14	877
Rail, Compound	C. Conrad	202, 635	Apr. 23, 1878	858	247	13	732
Rail, Curved street	W. W. Humphrey	202, 945	Apr. 30, 1878	1195	345	13	778
Railing, Metallic	W. H. Brines	202, 405	Apr. 16, 1878	590	173	13	690
Rail-joint	L. I. Baker and L. O. Root	205, 338	June 25, 1878	990	293	13	1155
Rail-joint	O. Eckert and J. W. Levan	205, 369	June 25, 1878	1021	302	13	1158
Rail-joint	H. W. Hammersmith	199, 437	Jan. 22, 1878	747	219	13	140
Rail-joint	W. A. Hawthorn	205, 265	June 25, 1878	904	268	13	1144
Rail-joint	C. Lewis	206, 337	July 23, 1878	1003	286	14	148
Rail-joint	P. T. Madison	206, 741	Aug. 6, 1878	85	27	14	217
Rail-joint	A. McHarry	205, 287	June 25, 1878	930	276	13	1147
Rail-joint	F. M. Morgan	206, 684	Aug. 6, 1878	31	9	14	210
Rail-joint	E. J. Roberts	201, 290	Mar. 12, 1878	480	147	13	493
Rails	R. W. Welch	209, 739	Nov. 5, 1878	222	67	14	711
Rails and scrap, Melting and treating iron and steel	G. W. Swett	203, 957	May 21, 1878	784		13	939
Rails, Chair for switch	S. H. Havens	199, 155	Jan. 15, 1878	461	136	13	88
Rails, Re-rolling old	T. Glaze and W. Westwater	205, 074	June 18, 1878	696	{ 205 206 }	13	1111
Rails to metallic sleepers, Fastening	F. B. Freudenberg	210, 774	Dec. 10, 1878	423	117	14	887
Railway-brake	J. and J. G. Hardy	208, 170	Sept. 17, 1878	640	188	14	439
Railway-brake, Automatic	W. L. Card	201, 594	Mar. 26, 1878	825	251	13	552
Railway-car signal, Electric	C. L. Mees and I. A. Sherman	207, 538	Aug. 27, 1878	945	277	14	337
Railway-carriage brake	R. D. Sanders	204, 378	May 28, 1878	1246	{ 354 355 }	13	1001
Railway-carriages, &c., Apparatus for heating	L. F. J. Lemennier and E. Gerard	207, 289	Aug. 20, 1878	668	198	14	297
Railway cattle-guard	J. W. Street	199, 941	Feb. 5, 1878	54	17	13	241
Railway-chair	I. Wells	203, 570	May 14, 1878	372	105	13	879
Railway cross-tie	J. H. Thompson	207, 320	Aug. 20, 1878	697	208	14	301
Railway-crossing	H. Chance	206, 323	July 23, 1878	985	280	14	145
Railway-crossing	W. J. Morden	205, 496	July 2, 1878	33	11	14	13
Railway-crossing	E. Shelton	210, 639	Dec. 10, 1878	282	77, 78	14	869
Railway-crossing	J. H. Sparkes	203, 953	May 21, 1878	781	224	13	938
Railway ditching-machine	D. Horrie	205, 270	June 25, 1878	908	269	13	1144
Railway, Elevated	A. Brandon	200, 969	Mar. 5, 1878	146	47, 48	13	438
Railway, Elevated	J. W. Post	206, 385	July 23, 1878	1057	304	14	154
Railway, Elevated street	C. Leavitt	211, 026	Dec. 17, 1878	724	199	14	933
Railway-frog	L. Murphy	202, 455	Apr. 16, 1878	642	187	13	698
Railway-frog	L. H. North	205, 126	June 18, 1878	744	221	13	1118
Railway-frog	W. Wharton, jr	207, 328	Aug. 20, 1878	704	210	14	392
Railway-gate	C. P. Austin	204, 279	May 28, 1878	1141	{ 326 327 }	13	988
Railway-gate	S. Barnes	207, 154	Aug. 20, 1878	527	158	14	279
Railway-gate	T. C. Garlington	205, 854	July 9, 1878	434	124	14	68
Railway-gate	J. M. McCaffrey and J. Larkins	204, 160	May 28, 1878	1020	290	12	972
Railway-gate	A. Selser	205, 913	July 9, 1878	501	142	14	76
Railway, Inclined-plane	R. Knudsen	198, 888	Jan. 1, 1878	170	48	13	35
Railway, Portable	F. Arnat	207, 151	Aug. 20, 1878	525	158	14	279
Railway, Portable	N. W. Condict, jr	203, 007	May 21, 1878	840	240	13	945
Railway, Portable	R. Decey and J. Turl	206, 705	Aug. 6, 1878	50	15	14	213
Railway-rail	S. Aldred	206, 208	July 23, 1878	851	242	14	128
Railway-rail	L. Leyboldt	206, 738	Aug. 6, 1878	82	26	14	217
Railway-rail	L. Leyboldt	209, 817	Nov. 12, 1878	310	92	14	726
Railway-rail	M. B. Stafford	209, 302	Oct. 22, 1878	933	272	14	630
Railway-rail, Curved	W. W. Humphrey	210, 696	Dec. 10, 1878	339	93	14	877
Railway-rail joint	J. B. Allen	200, 013	Feb. 5, 1878	118	39	13	252
Railway-rail joint	J. E. Ferguson	205, 848	July 9, 1878	430	122	14	67
Railway-rail joint	W. R. Gillis	205, 857	July 9, 1878	438	124	14	68
Railway-rail joint	D. R. Harder	207, 119	Aug. 20, 1878	494	148	14	275
Railway-rail joint	S. E. Hilliard	207, 180	Aug. 20, 1878	555	166	14	282
Railway-rail joint	O. Pagan	204, 363	May 28, 1878	1232	351	13	999
Railway-rail joints, Fastening for	J. M. Bucklin	201, 647	Mar. 26, 1878	880	268	13	560
Railway-rails, Device for mulling	A. Atwood	208, 880	Oct. 15, 1878	467	135	14	563
Railway-rails, Fagot for	S. McCloud	206, 810	Aug. 6, 1878	155	49	14	226
Railway-rails, Manufacture of	B. C. Lauth	210, 616	Dec. 10, 1878	259	71	14	866
Railway-rails, Roll for reducing old iron	B. P. Brunner	209, 743	Nov. 5, 1878	227	68	14	711



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Railway-rails, Securing .....	A. J. Acaster .....	205,600	July 2, 1878	138	42, 43	14	27
Railway-rails, Wooden key for securing .....	J. Sample, J. Grantham, and W. M. Ward and W. Waddle .....	201,839	Mar. 26, 1878	1067	325	13	588
Railway safety-gate .....	H. A. Stearns .....	210,642	Dec. 10, 1878	286	78, 79	14	870
Railway-signal .....	J. T. Halsey .....	205,858	July 9, 1878	438	125	14	68
Railway-signal .....	C. E. Hanscom .....	209,042	Oct. 15, 1878	646	187 188	14	586
Railway-signal .....	M. A. Stevens .....	199,234	Jan. 15, 1878	535	158	13	99
Railway-signal .....	A. R. Swift .....	199,384	Jan. 22, 1878	697	204	13	132
Railway-signal, Electric .....	C. D. Tisdale .....	209,148	Oct. 22, 1878	783	227	14	609
Railway-signal, Electro-magnetic .....	H. W. Spang .....	208,995	Oct. 15, 1878	592	172	14	579
Railway-spike .....	E. J. Remillon .....	206,898	Aug. 13, 1878	268	81	14	243
Railway-switch .....	A. B. Adams, G. E. Cain, and R. Simonton .....	206,066	July 16, 1878	670	193	14	103
Railway-switch .....	J. Briody .....	204,710	June 11, 1878	295	92	13	1057
Railway-switch .....	E. H. Bronson .....	204,711	June 11, 1878	298	92	13	1058
Railway-switch .....	E. H. Bronson .....	210,203	Nov. 26, 1878	843	248	14	804
Railway-switch .....	J. S. Broome and C. S. Archer .....	206,220	July 23, 1878	860	246	14	130
Railway-switch .....	J. W. Close .....	202,632	Apr. 23, 1878	854	245 246	13	732
Railway-switch .....	H. Elliott .....	208,802	Oct. 8, 1878	375	106	14	546
Railway-switch .....	C. F. Gessert .....	203,133	Apr. 30, 1878	1378	401	13	802
Railway-switch .....	E. Gordon and J. A. Dwygan .....	205,480	July 2, 1878	17	6	14	11
Railway-switch .....	R. Gray .....	202,021	Apr. 2, 1878	157	46	13	622
Railway-switch .....	L. T. Hay .....	205,483	July 2, 1878	20	6, 7	14	11
Railway-switch .....	A. E. McDonald .....	208,026	Sept. 17, 1878	489	146	14	419
Railway-switch .....	D. Pollock .....	199,570	Jan. 22, 1878	882	259	13	162
Railway-switch .....	H. H. Potter .....	201,826	Mar. 26, 1878	1051	321	13	588
Railway-switch .....	J. C. Rantz .....	201,945	Apr. 2, 1878	82	23	13	611
Railway-switch .....	G. H. Soule .....	210,216	Nov. 26, 1878	761	226	14	794
Railway-switch .....	W. Spielman .....	200,353	Feb. 12, 1878	475	140	13	314
Railway-switch .....	W. W. Todd and H. M. Tschudy .....	210,373	Nov. 26, 1878	936	272	14	816
Railway-switch bar .....	R. Gurley .....	205,379	June 25, 1878	1090	305	13	1158
Railway-switch bar .....	J. A. Kirby .....	210,860	Dec. 17, 1878	521	147	14	909
Railway-switch signal .....	R. L. and G. W. Vernon .....	205,703	July 2, 1878	256	77	14	41
Railway switch, Street .....	J. V. McIlroy .....	206,957	Aug. 13, 1878	320	97	14	249
Railway switch, Street .....	C. B. Payson and C. H. Fowler .....	208,263	Sept. 24, 1878	755	221	14	457
Railway-switches, Electric signaling apparatus for .....	S. C. Hendrickson .....	190,977	Feb. 5, 1878	85	28	13	246
Railway system .....	P. Hevner .....	209,480	Oct. 29, 1878	1126	328 329	14	662
Railway-tie .....	W. E. Curtiss .....	207,719	Sept. 3, 1878	139	42	14	367
Railway-track .....	A. Bowman .....	206,416	July 30, 1878	1106	316	14	165
Railway-track .....	B. F. Card .....	208,957	Oct. 15, 1878	556	162	14	574
Railway-track .....	G. W. Cottingham .....	206,297	July 23, 1878	949	269	14	141
Railway-track .....	E. R. Dingley .....	210,244	Nov. 26, 1878	790	234	14	797
Railway-track .....	H. A. Haarmann .....	201,667	Mar. 26, 1878	895	273	13	562
Railway-track .....	A. Herring .....	206,876	Aug. 13, 1878	240	76	14	240
Railway-track .....	G. Lehlbach .....	200,737	Feb. 26, 1878	891	262	13	362
Railway-track .....	T. W. Travis .....	202,607	Apr. 16, 1878	809	234	13	717
Railway-track .....	T. W. Travis .....	206,647	July 30, 1878	1348	338	14	194
Railway-track connection .....	W. C. Allison .....	205,822	July 9, 1878	404	116	14	64
Railway-track drill .....	F. J. Underwood .....	205,927	July 9, 1878	516	146	14	78
Railway-track, Portable .....	F. B. and R. M. Miles .....	207,792	Sept. 3, 1878	210	65	14	373
Railway-track, Portable .....	N. W. Condit, jr. .....	203,006	May 21, 1878	839	240	13	945
Railway track, Street .....	J. A. Kirby .....	203,463	May 7, 1878	240	69	13	853
Railway-track tie and support .....	G. F. Folsom .....	210,681	Dec. 10, 1878	327	89	14	875
Railway-tracks, Device for driving cattle from .....	W. A. Simpson and S. Kimball .....	209,299	Oct. 22, 1878	929	271	14	629
Railway-trains, Electric signal apparatus for .....	D. H. Walker and C. C. Egerton .....	206,154	July 16, 1878	771	221	14	114
Railway-trains, Smoke and cinder conveyor for .....	J. Casey .....	202,518	Apr. 16, 1878	698	204	13	705
Railway-tube, Wire-rope .....	W. Eppelsheimer .....	199,900	Feb. 5, 1878	10	3	13	224
Railway-tube, Wire-rope .....	W. Eppelsheimer .....	199,901	Feb. 5, 1878	11	4	13	224
Railway turn-tables, Locking device for .....	E. H. Johnston .....	202,828	Apr. 23, 1878	1065	305	13	758
Railways, Apparatus for destroying vegetation on .....	L. B. Simpson .....	206,628	July 30, 1878	1325	381	14	192
Railways, &c., Bearings and support for elevated .....	B. F. Britton .....	207,245	Aug. 20, 1878	624	187	14	291
Railways, Griper for wire-rope .....	J. Hansen .....	207,118	Aug. 20, 1878	493	148	14	275
Railways, Means for lessening noise on .....	N. Kenny .....	208,475	Oct. 1, 1878	22	6	14	492
Railways, Permanent way of .....	C. Wood .....	210,734	Dec. 10, 1878	379	104	14	881
Railways, Torpedo-signal for .....	P. E. Le Boulengé .....	208,616	Oct. 1, 1878	159	47	14	519
Rain-gage .....	L. Dunne and E. T. C. Richmond .....	200,443	Feb. 19, 1878	572	169	13	337
Rake .....	W. H. Kutsinger .....	201,254	Mar. 12, 1878	440	136	13	467
Rake:							
See Cranberry-rake. Hay-rake.							
Garden-rake. Lawn-rake.							
Hand-rake. Mash-rake.							
Harvester-rake. Metal rake.							
Ram, Hydraulic .....	I. B. Millington .....	200,081	Feb. 5, 1878	194	61	13	263
Range, Cooking .....	W. H. Barnes .....	201,086	Mar. 12, 1878	260	84	13	463
Range, Cooking .....	N. A. Boynton .....	200,247	Feb. 12, 1878	361	107 108	13	297
Range, Cooking .....	D. H. Thomas .....	207,914	Sept. 10, 1878	356	108	14	397
Range, Cooking and heating .....	J. Briggs .....	201,464	Mar. 19, 1878	703	214	13	531
Rasp-machine .....	C. F. Mudge and G. Whittaker .....	203,064	Apr. 30, 1878	1305	379 380	13	793
Ratchet bit-brace .....	H. L. Pratt .....	200,757	Feb. 26, 1878	908	267	13	396
Ratchet bit-stock .....	H. C. Hart .....	207,964	Sept. 10, 1878	400	123	14	404
Ratchet-drill .....	J. D. McAulis .....	206,468	July 30, 1878	1162	333	14	172
Ratchet-wheel and pawl mechanisms for rotating shafts by treadle-power .....	F. J. Ribble .....	207,682	Sept. 3, 1878	98	29	14	361
Ratchet-wrench .....	T. C. Hammond .....	207,117	Aug. 20, 1878	492	148	14	275
Rattan, Apparatus for working .....	G. P. Overin and J. H. Coldwell .....	204,992	June 18, 1878	616	181	13	1100
Rawhides, Machine for boarding or breaking .....	W. Coupe .....	199,415	Jan. 22, 1878	727	214	13	137
Razor-strop .....	A. V. Brokhahne .....	206,681	July 16, 1878	682	197	14	104
Razor-strop .....	A. V. Brokhahne .....	208,365	Sept. 24, 1878	858	250	14	470
Razor-strop .....	A. V. Brokhahne .....	208,670	Oct. 8, 1878	229	66	14	527
Razor-strop .....	A. V. Brokhahne .....	209,107	Oct. 22, 1878	737	214	14	604

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Razor-strop .....	G. W. Brown .....	208,068	Sept. 17, 1878	530	158	14	425
Razor-strop .....	A. V. M. Sprague .....	210,161	Nov. 19, 1878	687	204	14	780
Razor-strop .....	J. R. Torrey .....	205,512	July 2, 1878	52	15	14	15
Razor-strop case .....	A. V. Brokhahne .....	206,082	July 16, 1878	683	198	14	104
Razor-strop case .....	A. V. Brokhahne .....	209,108	Oct. 22, 1878	738	214	14	604
Reamer, Hand .....	F. W. Wild .....	202,618	Apr. 16, 1878	822	237	13	718
Reapers, Adjustable reel for .....	W. R. Hallett .....	209,120	Oct. 22, 1878	753	219	14	605
Recarburizer for use in the pneumatic process .....	R. W. Hunt and A. Wendell .....	200,724	Feb. 26, 1878	877	.....	13	390
Receptacle for articles to be screened .....	J. C. Scales .....	208,338	Sept. 24, 1878	831	243	14	467
Reciprocating engine .....	E. Baines .....	207,639	Sept. 3, 1878	58	17	14	356
Reciprocating engine .....	D. W. Kellogg .....	205,395	June 25, 1878	1047	310	13	1162
Reciprocating steam-engine .....	T. A. Henderson .....	202,171	Apr. 9, 1878	339	99	13	651
Reciprocating steam-engine .....	C. Hunter .....	200,725	Feb. 26, 1878	879	258	13	390
Reciprocating steam-engine .....	A. Kissell .....	206,460	July 30, 1878	1155	331	14	171
Reclining-chair .....	A. Collignon .....	201,912	Apr. 2, 1878	54	14	13	606
Reclining-chair .....	N. N. Horton .....	208,907	Oct. 15, 1878	498	144	14	567
Recorder:							
See Electric recorder. Swing-stile recorder.							
Revenue-recorder. Time-recorder.							
Speed-recorder.							
Recording-lock .....	J. R. Pershall .....	208,033	Sept. 17, 1878	497	148	14	420
Rectifying apparatus .....	J. H. Brockman .....	207,847	Sept. 10, 1878	280	86	14	388
Rectifying apparatus .....	A. J. and A. B. Gallagher .....	199,281	Jan. 15, 1878	583	170	13	107
Rectifying apparatus .....	A. J. and A. B. Gallagher .....	199,282	Jan. 15, 1878	284	171	13	107
Reel:							
See Bolting-reel. Rope-holding reel.							
Clothes-line reel. Sample-reel.							
Harvester-reel. Ticket-reel.							
Hose-reel.							
Reel .....	S. A. Elliott .....	200,268	Feb. 12, 1878	387	114	13	301
Reflector .....	P. Cavalier .....	210,094	Nov. 19, 1878	618	184	14	771
Reflector .....	C. Cothren .....	209,328	Oct. 29, 1878	969	282	14	638
Reflector .....	S. P. Kase .....	208,607	Oct. 1, 1878	152	44	14	509
Reflector, Candlestick .....	M. C. Meigs .....	209,576	Nov. 5, 1878	42	11	14	686
Reflector for candles .....	M. C. Meigs .....	209,178	Oct. 22, 1878	815	236	14	614
Reflector for electric lights .....	A. A. Lambert .....	210,543	Dec. 3, 1878	166	44	14	845
Reflector for gas-burners .....	G. Walton .....	200,233	Feb. 12, 1878	346	103	13	295
Reflector for lamps, &c. ....	C. Robinson .....	199,575	Jan. 22, 1878	887	260	13	163
Reflector, Lamp .....	P. Cavalier .....	200,028	Feb. 5, 1878	133	44	13	254
Reflector, Lamp .....	A. C. Sheldon and E. B. Pope .....	205,308	June 25, 1878	955	283	13	1150
Reflector, Lamp .....	J. H. White .....	209,636	Nov. 5, 1878	111	33	14	696
Refrigerating and air-cooling apparatus .....	D. L. Holden and E. W. Byrn .....	209,892	Nov. 12, 1878	387	115	14	736
Refrigerating apparatus .....	H. and J. Bell and J. J. Coleman .....	202,509	Apr. 16, 1878	687	202	13	705
Refrigerating apparatus .....	J. A. Whitney .....	210,979	Dec. 17, 1878	670	185	14	927
Refrigerating-machine, Ether-meter for .....	J. Siddeley and F. M. Mackay .....	208,045	Sept. 17, 1878	510	152	14	422
Refrigerating-plug for cans .....	J. J. Johnson .....	205,486	July 2, 1878	23	7	14	11
Refrigerating transportation-can .....	W. A. Moore .....	204,239	May 28, 1878	1105	315	13	983
Refrigerator .....	G. E. Acklom .....	199,891	Feb. 5, 1878	1	1	13	233
Refrigerator .....	A. Axt .....	209,852	Nov. 12, 1878	350	104	14	732
Refrigerator .....	J. Bense .....	206,215	July 23, 1878	856	244	14	129
Refrigerator .....	A. Bettridge .....	208,148	Sept. 17, 1878	613	181	14	436
Refrigerator .....	A. J. Chase .....	210,905	Dec. 17, 1878	689	190	14	929
Refrigerator .....	W. Grayson .....	210,321	Nov. 26, 1878	873	257	14	808
Refrigerator .....	R. T. Hambrook .....	204,216	May 28, 1878	1083	309	13	980
Refrigerator .....	W. Horn, Jr., C. Schaefer, and F. J. Wehrle .....	207,356	Aug. 27, 1878	752	224	14	313
Refrigerator .....	E. B. Jewett .....	198,768	Jan. 1, 1878	48	12, 13	13	15
Refrigerator .....	J. W. Lawrence .....	206,028	July 16, 1878	630	182	14	97
Refrigerator .....	J. C. Moore .....	210,464	Dec. 3, 1878	78	19	14	834
Refrigerator .....	T. C. Phillips .....	216,822	Aug. 6, 1878	167	53	14	227
Refrigerator .....	A. C. Rand .....	202,867	Apr. 23, 1878	1103	{ 316 } { 317 }	13	763
Refrigerator .....	J. D. Rasey .....	199,993	Feb. 5, 1878	101	33	13	249
Refrigerator .....	R. Spencer .....	209,934	Nov. 12, 1878	432	130	14	742
Refrigerator .....	D. A. Stevens .....	201,713	Mar. 26, 1878	935	287	13	569
Refrigerator .....	N. Wheeler .....	201,639	Mar. 26, 1878	872	265	13	559
Refrigerator .....	J. A. Whitney .....	209,534	Oct. 29, 1878	1188	345	14	670
Refrigerator .....	A. Zinsser .....	209,314	Oct. 22, 1878	943	.....	14	631
Refrigerator-box .....	G. D. Cunliffe .....	200,982	Mar. 5, 1878	157	51	13	440
Refrigerator-building .....	J. Lorenz and F. W. Bender .....	204,586	June 4, 1878	158	51, 52	13	1035
Refrigerator-building .....	J. Rumbaugh .....	206,140	July 16, 1878	753	216	14	112
Refrigerator-car .....	J. J. Bate .....	203,236	May 7, 1878	1	1	13	821
Refrigerator-car .....	R. M. Birdsall .....	199,019	Jan. 8, 1878	308	91	13	64
Refrigerator-car .....	M. Haughey .....	204,729	June 11, 1878	319	97	13	1060
Refrigerator-car .....	A. W. Zimmerman .....	199,343	Jan. 15, 1878	646	189	13	116
Refrigerator for cooling articles under ground .....	S. P. Miller .....	200,624	Feb. 26, 1878	768	226	13	375
Refrigerator for cooling beer kegs and bottles .....	J. Cavood .....	200,129	Feb. 12, 1878	247	75	13	280
Refrigerator, Portable .....	J. J. Phillips .....	206,128	July 16, 1878	741	213	14	111
Refrigerator shipping-box .....	C. H. and M. C. Turner .....	199,332	Jan. 15, 1878	636	185	13	115
Refrigerator-wagon .....	A. Ulrich .....	209,729	Nov. 5, 1878	208	62	14	708
Refrigerators, &c., Iron conducting-casing for .....	J. Sproat .....	199,324	Jan. 15, 1878	628	{ 182 } { 183 }	13	114
Refrigerators, Ice-grate for .....	J. M. Ayer .....	207,382	Aug. 27, 1878	775	231	14	316
Register:							
See Alarm-register. Grain-spout register.							
Bottle-register. Hot-air register.							
Car-step register. Passenger-register.							
Distance-register. Revenue-register.							
Electric register. Turnstile-register.							
Fare-register.							
Register .....	J. Bennor and P. Pond .....	200,642	Feb. 26, 1878	788	232	13	378
Register .....	H. Clark .....	200,259	Feb. 12, 1878	374	{ 110 } { 111 }	13	299

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Register.....	H. Clarke.....	203,707	May 14, 1878	505	{ 143 144 }	13	896
Register.....	W. C. McGill.....	203,749	May 14, 1878	552	156	13	902
Register.....	G. C. Smith.....	210,159	Nov. 19, 1878	686	204	14	770
Register-box for heaters.....	J. Moore, jr.....	201,551	Mar. 19, 1878	764	233	13	539
Regulator:							
See Boiler and furnace	Heater-regulator.						
regulator.	Lamp-regulator.						
Clock-regulator.	Millstone-feed regulator.						
Electric-light regu-	Flow-regulator.						
lator.	Pressure-regulator.						
Feed-water regula-	Steam-engine regulator.						
tor.	Watch-regulator.						
Gas-regulator.	Water-flow regulator.						
Reheating-furnace.....	H. McDonald.....	203,634	May 14, 1878	427	123	13	898
Rein attachment, Check.....	C. H. Dow.....	209,553	Nov. 5, 1878	16	5	14	693
Rein attachment, Check.....	O. Hanks.....	210,524	Dec. 3, 1878	146	38	14	842
Rein attachment, Check.....	G. B. Thomson.....	209,941	Nov. 12, 1878	439	133	14	743
Rein guide, Check.....	A. L. Whitney.....	204,269	May 28, 1878	1132	324	13	887
Rein-holder.....	R. Floryanowicz.....	207,024	Aug. 13, 1878	385	118	14	257
Rein-holder.....	G. H. Hess.....	202,029	Apr. 2, 1878	168	49	13	623
Rein-holder.....	J. C. Maple.....	209,766	Nov. 12, 1878	261	78	14	720
Rein-holder.....	W. M. McCown.....	205,755	July 9, 1878	330	96	14	54
Rein-holder.....	G. and H. Piper.....	202,189	Apr. 9, 1878	356	104	13	653
Rein-holder.....	L. Turleau.....	208,866	Oct. 8, 1878	445	129	14	555
Rein-holder.....	D. H. Weaver and M. Heatwole	206,750	Aug. 6, 1878	98	31	14	219
Rein-holding attachment for harness.....	J. M. Taylor and J. Mackay.....	205,008	June 18, 1878	630	185	13	1102
Rein hook, Check.....	D. H. Clippinger.....	207,767	Sept. 10, 1878	229	72	14	361
Reins for two horses, Driving.....	G. R. Woolsey.....	206,912	Aug. 13, 1878	281	85	14	244
Reins, Spring-hook for check.....	J. Annin.....	209,850	Nov. 12, 1878	348	104	14	731
Rendering apparatus.....	T. L. Alberdingk.....	204,471	June 4, 1878	53	17	13	1020
Reservoir and wash-stand combined.....	A. D. Luffkin.....	198,770	Jan. 1, 1878	50	13	13	15
Retort-lifter.....	F. W. Wilson.....	203,397	May 7, 1878	169	49	13	844
Retort, Metallic.....	W. H. Seaman.....	203,379	May 7, 1878	151	43	13	841
Retorts, crucibles, &c., Machine for making.....	W. Morgan.....	202,366	Apr. 16, 1878	553	162	13	665
Revenue-recorder.....	H. C. Aldrich.....	208,877	Oct. 8, 1878	457	132	14	557
Revenue-register.....	S. J. Tucker.....	202,305	Apr. 9, 1878	472	138	13	670
Reverberating furnace.....	W. Mann.....	202,845	Apr. 23, 1878	1082	309	13	769
Reverberating furnace.....	W. Mann.....	207,972	Sept. 10, 1878	416	126	14	405
Revolvers, Charging-magazine and holster for.....	R. White.....	202,613	Apr. 16, 1878	815	236	13	718
Revolvers, Charging-magazine for.....	R. White.....	201,855	Mar. 26, 1878	1082	329	13	590
Revolving fountain.....	H. G. Fiske.....	199,633	Jan. 29, 1878	979	{ 284 285 }	13	185
Revolving furnace with regenerator.....	C. W. Siemens.....	201,204	Mar. 12, 1878	483	{ 148 149 }	13	493
Ribbon-block.....	T. Hagerty.....	199,641	Jan. 29, 1878	987	287	13	186
Rice-beaters, churns, &c., Machine for operating.....	W. J. Henderson.....	206,449	July 30, 1878	1141	327	14	169
Rice-cleaning apparatus.....	J. H. C. Martin.....	207,881	Sept. 10, 1878	320	97, 98	14	383
Rice-hulling machine.....	W. C. Howard.....	203,917	May 21, 1878	737	212	13	933
Rice-hulling machine.....	W. G. Stevenson.....	207,080	Aug. 13, 1878	436	135	14	263
Rice pounding and hulling mill.....	F. Brotherhood.....	210,002	Nov. 19, 1878	521	157	14	758
Ring:							
See Ear-ring.	Martingale-ring.						
Finger-ring.	Scarf-ring.						
Galvanic ring.	Snout-ring.						
Lap-ring.	Spinning-ring.						
Rings, Device for sizing.....	E. Davies.....	201,654	Mar. 26, 1878	885	269	13	561
Ripping and cutting device, Combined.....	C. Bean.....	205,034	June 18, 1878	655	193	13	1166
Rivet.....	M. Bray.....	203,815	May 21, 1878	634	178	12	919
Rivet.....	P. Clifford.....	202,904	Apr. 30, 1878	1240	359	13	764
Rivet-setting machine.....	M. Bray.....	199,503	Jan. 23, 1878	812	238	13	151
Rivets, Machinery for inserting.....	T. Boardman.....	203,882	May 21, 1878	698	200	13	928
Rivets or clasps, Machinery for applying.....	E. Morse.....	201,192	Mar. 12, 1878	372	116	13	473
Rivets, Tool for cutting.....	A. S. McDowell.....	201,262	Mar. 12, 1878	450	139	13	488
Riveting device.....	E. Bourne.....	204,476	June 4, 1878	57	18, 19	13	1020
Riveting-machine.....	H. MacColl.....	207,049	Aug. 13, 1878	406	126	14	280
Road-engine.....	B. C. Hicks.....	206,176	July 23, 1878	811	{ 231 232 }	14	124
Road-engine.....	W. L. Hussey.....	207,524	Aug. 27, 1878	930	273	14	335
Roaster:							
See Coffee-roaster.	Ore-roaster.						
Coffee and nut roaster.	Pea-nut roaster.						
Meat-roaster.....							
Rock-boring machine, Hydraulic.....	A. Brandt.....	200,024	Feb. 5, 1878	128	42	13	253
Rock-channeling machine.....	A. G. Webster.....	207,374	Aug. 27, 1878	766	228	14	315
Rock-drill.....	C. Burleigh.....	200,690	Feb. 26, 1878	841	247	13	385
Rock-drill.....	C. H. Chandler.....	201,651	Mar. 26, 1878	883	269	13	590
Rock-drill.....	U. Cummings.....	210,189	Nov. 26, 1878	735	218	14	790
Rock-drill.....	W. H. Elliot.....	202,338	Apr. 16, 1878	630	154	13	681
Rock-drill.....	T. B. and T. R. Jordan.....	211,022	Dec. 17, 1878	719	198	14	912
Rock-drill.....	C. D. Pierce.....	205,901	July 9, 1878	485	139	14	74
Rock-drill.....	H. C. Sergeant.....	202,060	Apr. 2, 1878	198	58	13	627
Rock-drill.....	E. S. Winchester.....	199,389	Jan. 22, 1878	703	{ 207 208 }	13	133
Rock-drill.....	E. S. Winchester.....	208,448	Sept. 24, 1878	946	278	14	481
Rock-drill.....	E. S. Winchester.....	208,449	Sept. 24, 1878	947	278	14	481
Rock-drills, &c., Feed-screw and nut for.....	R. Allison.....	206,067	July 16, 1878	671	194	14	103
Rock-drilling engine.....	W. H. Elliot.....	202,638	Apr. 23, 1878	861	247	13	753
Rock-drilling engine.....	W. H. Elliot.....	208,228	Sept. 24, 1878	711	209	14	422
Rock-drilling machine.....	S. G. Bryer.....	207,163	Aug. 20, 1878	534	160	14	280
Rock-drilling machine.....	A. J. Mereshon.....	207,885	Sept. 10, 1878	323	90	14	393
Rock-drilling or boring machine.....	T. B. Jordan.....	201,017	Mar. 5, 1878	195	62, 63	13	445
Rockier, Child's.....	J. G. De Bretton.....	207,846	Sept. 10, 1878	279	86	14	358
Rocking-chair.....	J. Beiersdorf.....	201,087	Mar. 12, 1878	270	84	13	463
Rocking-chair.....	G. W. Collie.....	208,714	Oct. 8, 1878	277	78	14	533
Rocking-chair.....	A. Dietrich.....	203,602	May 14, 1878	400	113	13	883

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Rocking-chair	J. Fernquist	205,070	June 18, 1878	694	204	13	1111
Rocking-chair	A. A. Halladay	209,886	Nov. 12, 1878	382	114	14	736
Rocking-chair	E. A. C. Hesse	200,296	Feb. 12, 1878	414	123	13	305
Rocking-chair	J. Krapp	190,212	Jan. 15, 1878	516	152	13	96
Rocking-chair	J. Krapp	200,204	Feb. 12, 1878	320	96	13	201
Rocking-chair	H. Lamprecht, jr.	207,359	Aug. 27, 1878	754	225	14	314
Rocking-chair	A. Morris	208,626	Oct. 1, 1878	170	50	14	512
Rocking-chair	C. C. Nichols	201,440	Mar. 19, 1878	650	198	13	524
Rocking-chair	T. J. Palmer	198,810	Jan. 1, 1878	92	25	13	22
Rocking-chair	L. Rausch	204,373	May 28, 1878	1242	353	13	1000
Rocking-chair	F. Rhoner and S. Willershausen	203,294	May 7, 1878	63	19	13	828
Rocking-chair	G. Roeder	200,937	Mar. 5, 1878	115	39	13	433
Rocking-chair	M. Schrenkeisen	202,476	Apr. 16, 1878	659	193	13	700
Rocking-chair	J. F. Schulte	207,900	Sept. 10, 1878	342	103	14	395
Rocking-chair	W. Seng	207,135	Aug. 20, 1878	510	154	14	277
Rocking-chair	C. S. E. and J. G. Spoerl	202,291	Apr. 9, 1878	457	134	13	667
Rocking-chair	C. S. E. and J. G. Spoerl	206,363	July 23, 1878	1031	296	14	151
Rocking-chair	S. Willershausen and F. Rhoner	200,809	Feb. 26, 1878	957	282	13	403
Rocking-chair	S. Willershausen	207,560	Aug. 27, 1878	999	292	14	343
Rocking-chair	J. Zangerle	203,979	May 21, 1878	803	231	13	941
Rocking-chair attachment	K. Thompson and L. G. Bergstrom	200,414	Feb. 19, 1878	543	160	13	332
Rocking-chair fan attachment	D. N. Selleg	201,129	Mar. 12, 1878	315	96	13	469
Rocking-chair, Folding	H. B. Smith	207,312	Aug. 20, 1878	690	205	14	300
Rocking-chair, Folding	E. Tucker	205,015	June 18, 1878	636	187	13	1103
Rod:							
See Bracket-rod.	Picture-rod.						
Fishing-rod.	Pump-rod.						
Heddle-rod.	Stair-rod.						
Lightning-rod.	Sucker-rod.						
Nail-rod.	Wantage-rod.						
Roller:							
See Crushing-roller.	Land-roller.						
Curtain-roller.	Shade-roller.						
Field-roller.							
Roller, Damping	J. A. Brown	207,160	Aug. 20, 1878	532	160	14	280
Roller-mill for reducing grain	L. Nemelka	209,829	Nov. 12, 1878	325	97	14	728
Rolling and straightening metal bars, Machine for	S. Trethewey	199,482	Jan. 22, 1878	790	232	13	147
Rolling blanks for carriage-axle clips, Machine for	E. D. Clapp and F. Van Patten	200,603	Feb. 26, 1878	749	219 220	13	372
Rolling hoes, picks, &c., Machine for	J. Pedder	207,367	Aug. 27, 1878	760	227	14	314
Rolling machinery, Metal	P. S. Bradford	205,945	July 10, 1878	547	155	14	87
Rolling metals, Roll for	D. Jones	199,368	Jan. 22, 1878	683	200	13	150
Rolling-mill	A. Hooven and W. H. Adle	206,330	July 23, 1878	992	282	14	146
Rolling-mill	C. H. Morgan	199,459	Jan. 22, 1878	769	225	13	144
Rolling mill, Metal	W. R. Jenkins, jr.	204,976	June 18, 1878	600	175 176	13	1098
Rolling mill, Metal	J. H. Sweet	200,582	Feb. 19, 1878	709	208 209	13	358
Rolling-mill pinions, Journal-box for	H. Hamilton	206,319	July 23, 1878	980	279	14	145
Rolling-mills, Journal and bearing for	S. W. Baldwin	208,949	Oct. 15, 1878	545	160	14	573
Rolling plate-metal, Roll for	S. T. Wellman	201,211	Mar. 12, 1878	392	121	13	481
Rolling sucker-rod blanks, Machine for	J. H. Aiker	201,861	Apr. 2, 1878	2	1	13	509
Rolling taper shapes, Machine for	H. A. Williams	208,447	Sept. 24, 1878	944	277 278	14	481
Roof and floor, Fire-proof	F. L. Kane	199,210	Jan. 15, 1878	515	151	13	96
Roof-battening	N. H. Brown	202,784	Apr. 23, 1878	1012	290	13	751
Roof-battening	J. C. Wands	209,310	Oct. 22, 1878	939	274	14	631
Roof, Composition	M. B. Bailey	200,122	Feb. 12, 1878	242	73	13	279
Roof-covering and sheathing	W. H. Kershaw	204,899	June 18, 1878	523	153	13	1088
Roof, Fire and water proof	T. New	209,131	Oct. 22, 1878	767	223	14	607
Roof, Gravel	E. B. Warren	202,493	Apr. 16, 1878	473	197	13	702
Roof-tile, Metallic	J. Hilgers	208,819	Oct. 8, 1878	391	111	14	548
Roofs, Attaching slates to	S. Farquhar	209,031	Oct. 15, 1878	636	184	14	585
Roofs, Closing seams of sheet-metal	H. E. Bottum	205,172	June 25, 1878	809	240	13	1131
Roofs, Ridge-saddle for	W. Darby	201,098	Mar. 12, 1878	282	87	13	465
Roofing	L. Peirce	205,132	June 18, 1878	749	223	13	1118
Roofing and building purposes, Materials for	D. S. Armstrong	206,850	Aug. 13, 1878	213	69	14	237
Roofing and paving purposes, Portable pitch-kettle for	G. W. Evans	207,647	Sept. 3, 1878	67	20	14	357
Roofing, Apparatus for making sheet-metal	W. S. Belt	209,747	Nov. 12, 1878	240	72	14	717
Roofing, Applying nail-heads to metal	J. L. Boyer	199,957	Feb. 5, 1878	68	22	13	243
Roofing, Cap and anchor for metallic	W. G. Hyndman	208,395	Sept. 24, 1878	887	258	14	474
Roofing composition, Fire-proof	E. W. Hickman	206,175	July 23, 1878	811		14	123
Roofing, Compound for	W. G. Elliott	210,308	Nov. 26, 1878	858		14	806
Roofing fabrics	C. M. Warren	202,902	Apr. 23, 1878	1142	327	13	767
Roofing for buildings	J. MacCarthy	209,906	Nov. 12, 1878	399	119	14	738
Roofing, Manufacture of composite	T. New	209,705	Nov. 5, 1878	183		14	705
Roofing material	T. New	209,830	Nov. 12, 1878	326		14	728
Roofing, Saturated sheathing for	W. H. Rankin	205,135	June 18, 1878	756		13	1119
Roofing-slate, Securing	L. E. Gannon	207,653	Sept. 3, 1878	71	21	14	358
Roofing, Sheet-metal	W. S. Grafton	205,186	June 25, 1878	824	244	13	1133
Roofing, Sheet-metal	M. Horrie	205,188	June 25, 1878	825	244	13	1133
Roofing, Sheet-metal	W. G. Hyndman	210,613	Dec. 10, 1878	256	70	14	866
Roofing-slates, Fastening	G. Maranville	203,353	May 7, 1878	121	35	13	836
Roofing-tile	H. E. Merrill	202,953	Apr. 30, 1878	1203	347	13	779
Roof-cutter	W. F. Weller	207,144	Aug. 20, 1878	519	156	14	278
Rope	V. P. Travers	206,058	July 16, 1878	663	191	14	102
Rope and cordage, Manufacture of	E. S. Bloomfield	208,286	Sept. 24, 1878	779		14	459
Rope-clamp	J. C. Covert	208,157	Sept. 17, 1878	628	185	14	438
Rope-holder	J. Mizer	204,838	June 11, 1878	449	129	13	1073
Rope-holding device	R. B. White	204,692	June 11, 1878	277	86	13	1055
Rope-holding reel	C. N. Cass	209,020	Oct. 15, 1878	623	181	14	583
Rope socket and clamp, Combined	H. L. Heaton	206,321	July 23, 1878	963	289	14	115
Rosettes from wood, Tool for making	J. H. Burnshaw	209,012	Oct. 15, 1878	616	179	14	682
Rosin, Package for bleaching and packing	A. D. Cutts	209,384	Oct. 29, 1878	1029	299	14	647



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Rotary cutter	W. F. and J. Barnes	203, 578	May 14, 1878	378	107	13	880
Rotary engine	B. T. Babbitt	202, 134	Apr. 9, 1878	295	87	13	645
Rotary engine, &c.	W. E. Bartrum and H. C. Powell	208, 559	Oct. 1, 1878	102	31	14	503
Rotary engine	J. Butcher	208, 565	Oct. 1, 1878	113	32, 33	14	504
Rotary engine	J. Darling	208, 298	Sept. 24, 1878	790	230	14	461
Rotary engine	G. Evens	200, 036	Feb. 5, 1878	142	46	13	256
Rotary engine	B. Frese	204, 430	June 4, 1878	16	6	13	1015
Rotary engine	G. C. Hale	199, 061	Jan. 8, 1878	348	102	13	70
Rotary engine	J. Jardine	207, 968	Sept. 10, 1878	413	124	14	404
Rotary engine	R. B. Kidder	201, 113	Mar. 12, 1878	300	91	13	467
Rotary engine	F. Starkenberg	202, 882	Apr. 23, 1878	1121	322	13	765
Rotary engine	O. Stenberg	202, 884	Apr. 23, 1878	1123	322	13	765
Rotary engine	B. H. Taylor	202, 888	Apr. 23, 1878	1126	{ 323 324 }	13	765
Rotary engine	L. and W. T. Van Doren, jr.	201, 574	Mar. 19, 1878	789	240	13	543
Rotary engine	W. C. Wolfe	206, 380	July 23, 1878	1051	302	14	153
Rotary steam-engine	J. F. Brown	205, 043	June 18, 1878	664	195	13	1107
Rotary steam-engine	J. S. Hewitt	199, 709	Jan. 29, 1878	1052	307	13	196
Rotary steam-engine	W. Huston and H. N. Wickersham	205, 868	July 9, 1878	451	128	14	70
Rotary steam-engine	A. Siegrist	201, 456	Mar. 19, 1878	666	203	13	526
Rowing-machine	G. Goldie	199, 432	Jan. 22, 1878	742	218	13	140
Rowlock	J. A. Baines	199, 011	Jan. 8, 1878	302	89	13	63
Rowlock	J. Forbes, jr.	205, 372	June 25, 1878	1023	303	13	1159
Rowlock	F. Gould	207, 733	Sept. 3, 1878	153	46	14	368
Rowlock	I. C. Mayo	204, 159	May 28, 1878	1019	290	13	972
Rowlock	J. W. Norcross	204, 598	June 4, 1878	170	55	13	1037
Rowlock	C. C. Price, jr.	203, 770	May 14, 1878	572	161	13	904
Rowlock	R. R. and E. Spedden	198, 821	Jan. 1, 1878	100	28	13	23
Rowlock	J. Weyman	207, 465	Aug. 27, 1878	864	255	14	327
Rowlock	J. M. Wheeler	206, 757	Aug. 6, 1878	99	32	14	219
Rubber and kerite, Compound of India	A. G. Day	210, 407	Dec. 3, 1878	17	-----	14	827
Rubber clog	J. Pienovi	202, 462	Apr. 16, 1878	647	189	13	699
Rubber-cutting machine	C. Ford, J. M. Slade, and F. Baylies	204, 145	May 28, 1878	1003	285	13	970
Rubber, Hand	C. B. Fuller	205, 627	July 2, 1878	107	50	14	30
Rubber in sheets for dental and other uses, Packing and putting up	E. R. Mullett	208, 484	Oct. 1, 1878	30	9	14	493
Rubber roll, Vulcanized	A. Spadone	199, 116	Jan. 8, 1878	407	120	13	79
Rudder for canal-boats	J. Supple	203, 859	May 21, 1878	678	193	13	925
Rudder for vessels	J. C. Morton	205, 972	July 16, 1878	578	165	14	91
Rudder, Ship's	E. Robbins	205, 506	July 2, 1878	44	14	14	14
Rudders of vessels, Device for working	J. Morgan	206, 401	July 30, 1878	1091	312	14	163
Rule and gage, Board	D. L. Denimore	199, 807	Jan. 29, 1878	1145	306	13	210
Rule for making straight and circular lines	W. V. Marshall	199, 917	Feb. 5, 1878	32	10	13	237
Rule, Lumber	A. J. Colburn	204, 293	May 28, 1878	1158	331	13	990
Rule, square, and comb, Combined	G. R. Drew	201, 599	Mar. 26, 1878	832	253	13	553
Ruler, Registering attachment for measuring	W. Holmström	204, 823	June 11, 1878	417	123	13	1071
Ruler	H. Adler	206, 410	July 30, 1878	1101	214	14	164
Ruler	H. M. Barrows and W. Kennish	199, 253	Jan. 15, 1878	551	162	13	162
Ruler	G. Cousins	210, 922	Dec. 17, 1878	608	168	14	919
Ruler	J. W. Green	205, 795	July 9, 1878	375	108	14	60
Ruler, Parallel	J. C. Moss	200, 216	Feb. 12, 1878	329	99	13	292
Ruler, Quadrant parallel section-line	G. Soltmann	199, 588	Jan. 23, 1878	903	264	13	165
Ruling machine, Ink-feeding device for paper	W. Handy	208, 592	Oct. 1, 1878	139	40	14	507
Ruling machine, Paper	J. Dale	209, 330	Oct. 29, 1878	971	283	14	638
Ruling machine, Paper	E. Gouptel	206, 873	Aug. 13, 1878	237	75	14	240
Ruling machine, Paper	J. McAdams	206, 553	Feb. 19, 1878	681	200	13	353
Ruling machine, Paper	J. and W. A. McAdams	206, 809	Aug. 6, 1878	154	49	14	226
Ruling machine, Paper	E. J. Piper	205, 502	July 2, 1878	39	12, 13	14	14
S.							
Saccharification, Reducing vegetable substances to prepare the same for	J. W. Gaff	202, 016	Apr. 2, 1878	152	44	13	621
Saccharine liquids, Compound for defecating	F. L. Stewart	202, 295	Apr. 9, 1878	462	-----	13	668
Saccharine liquids, Defecation, decolorization, and refining of	J. W. Decastro	209, 608	Nov. 5, 1878	76	-----	14	691
Saccharine matter from air, Separating	E. K. Richards	199, 864	Jan. 29, 1878	1194	351	13	218
Sad-iron	I. P. Chalfant	205, 352	June 25, 1878	1003	297	13	1156
Sad-iron	J. Lidell	205, 656	July 2, 1878	202	60	14	35
Sad-iron	A. Lohmann	208, 322	Sept. 24, 1878	814	237	14	464
Sad-iron	W. Moores and J. Shepherd	207, 766	Sept. 3, 1878	185	57	14	372
Sad-iron	C. H. Parsons	207, 299	Aug. 20, 1878	677	{ 201 202 }	14	298
Sad-iron	J. B. Stamour	199, 325	Jan. 15, 1878	629	183	13	114
Sad-iron	H. B. Todd	206, 369	July 23, 1878	1040	298	14	152
Sad-iron and fluter	W. Chalmers and W. N. Reynolds	205, 473	July 2, 1878	10	3, 4	14	10
Sad-iron and heater	C. Ezard	205, 371	June 25, 1878	1023	303	13	1159
Sad-iron heater	J. Conrad	201, 995	Apr. 2, 1878	132	38	13	618
Sad-iron heater	S. J. Crockett	210, 997	Dec. 17, 1878	693	191	14	929
Sad-iron heater	G. Fencil	210, 108	Nov. 19, 1878	633	188	14	773
Sad-iron holder	M. M. Roberts	208, 035	Sept. 17, 1878	499	148	14	421
Sad-iron polisher	E. G. Rowe	204, 759	June 11, 1878	348	105	13	1064
Sad-iron stand	K. E. Keeler	204, 328	May 28, 1878	1204	343	13	996
Sad-irons, Thermometer attachment for	J. Van Gunster	204, 637	June 4, 1878	213	68	13	1042
Saddle and pad screw cutter	R. M. Selleck	198, 955	Jan. 8, 1878	245	70	13	53
Saddle-bags	H. L. Hernstein	202, 345	Apr. 16, 1878	533	156	13	682
Saddle-bags	A. Hoff	199, 067	Jan. 8, 1878	353	104	13	71
Saddle clip, Spring	J. G. English and E. F. Mersick	206, 778	Aug. 6, 1878	124	39	14	222
Saddle, Gig	S. S. and A. V. Sargeant	209, 427	Oct. 29, 1878	1071	311	14	653
Saddle, Harness	J. M. Gwinell	206, 318	July 23, 1878	980	279	14	145
Saddle, Harness	T. P. Holmes and J. F. Eldridge	209, 123	Oct. 22, 1878	756	220	14	606
Saddle, Harness	F. Koch	204, 673	June 11, 1878	257	80	13	1052
Saddle, Harness	S. Magnus	205, 112	June 18, 1878	733	218	13	1116



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Saddle, Harness .....	S. A. Marker .....	205,885	July 9, 1878	468	{ 133 134 }	14	72
Saddle, Harness .....	A. Ortmayer .....	210,431	Dec. 3, 1878	42	10	14	829
Saddle, Harness .....	J. Patten .....	207,203	Aug. 20, 1878	580	174	14	286
Saddle, Harness .....	A. F. Risser and M. G. Lang .....	206,405	July 30, 1878	1096	313	14	163
Saddle, Harness .....	G. E. Standish and L. S. Bailey .....	203,054	May 21, 1878	782	224	13	939
Saddle hook, Harness .....	J. H. Martin .....	207,973	Sept. 10, 1878	417	126	14	405
Saddle-loop .....	A. Gilliam .....	203,258	May 7, 1878	23	8	13	824
Saddle, Pack .....	T. Moore .....	206,188	July 23, 1878	823	235	14	125
Saddle, Riding .....	J. R. Dempsey .....	200,378	Feb. 19, 1878	511	151	13	328
Saddle, Riding .....	J. B. Gathright .....	204,892	June 18, 1878	516	151	13	1087
Saddle, Riding .....	A. D. Jones .....	204,978	June 18, 1878	602	176	13	1099
Saddle, Riding .....	J. L. Nothaf .....	209,415	Oct. 29, 1878	1056	307	14	651
Saddle-tree .....	B. F. Melton .....	201,934	Apr. 2, 1878	74	21	13	609
Saddle-tree fork .....	C. M. Lane and M. C. Franklin .....	203,626	May 14, 1878	420	120	13	885
Saddle tree, Gig .....	J. M. Gwinnell .....	209,968	Nov. 19, 1878	481	145	14	752
Saddle tree, Gig .....	G. Theobald .....	201,132	Mar. 12, 1878	317	97	13	469
Saddle tree, Harness .....	W. Fawcett .....	205,534	July 2, 1878	74	21	14	18
Saddle tree, Harness .....	J. H. Gordon .....	200,280	Feb. 12, 1878	397	118	13	302
Saddle tree, Harness .....	W. M. Ryerson .....	204,507	June 4, 1878	81	28	13	1024
Saddle tree, Riding .....	B. F. Barrow .....	207,939	Sept. 10, 1878	385	116	14	400
Saddles, Safety-hook for harness .....	W. H. Henderson .....	206,016	July 16, 1878	618	178	14	96
Saddles, Stirrup-suspender for riding .....	L. F. Johnston .....	199,716	Jan. 29, 1878	1057	309	13	197
Safe and vault fastening .....	E. Stockwell .....	206,147	July 16, 1878	703	219	14	113
Safe-bolt works .....	M. Adler .....	201,146	Mar. 12, 1878	332	102	13	472
Safe-bolt works .....	J. Rippin and W. Tuyer .....	201,702	Mar. 26, 1878	926	{ 283 284 }	13	567
Safe, Burglar-proof .....	G. L. Damon .....	200,823	Mar. 5, 1878	8	3	13	416
Safe, Burglar-proof .....	H. Gross .....	204,814	June 11, 1878	409	120	13	1070
Safe, Burglar-proof .....	D. O. Paige .....	199,567	Jan. 22, 1878	878	{ 257 258 }	13	162
Safe, Caloric .....	A. T. Snyder .....	204,920	June 18, 1878	547	159	13	1091
Safety-brake for machinery .....	A. A. Frérot .....	198,799	Jan. 1, 1878	81	22	13	20
Safety-brake for railway trains .....	L. Blenc .....	204,186	May 28, 1878	1053	299	13	976
Safety-chair, Baby's .....	E. Christman and J. Caldwell .....	202,991	Apr. 30, 1878	1238	358	13	784
Safety-pin .....	V. H. Blackinton .....	209,324	Oct. 29, 1878	966	281	14	638
Safety-pin .....	W. A. Butler .....	198,912	Jan. 1, 1878	197	56	13	39
Safety-pin .....	W. A. Butler .....	199,511	Jan. 22, 1878	823	240	13	153
Safety-pin .....	J. P. Lindsay .....	198,890	Jan. 1, 1878	171	49	13	35
Safety-pin .....	Z. G. Pierce .....	199,346	Jan. 15, 1878	651	190	13	117
Safety-pin .....	A. M. Smith .....	206,691	Aug. 6, 1878	37	11	14	211
Safety-pin .....	J. Q. A. Tresize .....	205,154	June 18, 1878	780	231	13	1122
Sail and rigging for vessels .....	J. W. Norcross .....	209,414	Oct. 29, 1878	1055	307	14	651
Sail-hank .....	C. A. Mathiesen .....	210,951	Dec. 17, 1878	638	177	14	923
Sails, Reefing and furling .....	C. E. S. Gederén .....	205,629	July 2, 1878	169	50, 51	14	31
Sails, Reefing and furling .....	W. H. Spooner .....	210,573	Dec. 3, 1878	204	54	14	850
Sails, Reefing fore and aft .....	T. Petersen .....	199,739	Jan. 29, 1878	1077	315	13	200
Salt, Apparatus for the manufacture of .....	W. W. Elmer .....	201,762	Mar. 26, 1878	989	302	13	576
Salt, Apparatus for the manufacture of .....	H. Ransford .....	209,984	Nov. 19, 1878	498	151	14	755
Salt from its admixture with impurities in crude brine, Recovering .....	J. H. König .....	210,541	Dec. 3, 1878	164	.....	14	844
Salve .....	J. G. Müller .....	203,848	May 21, 1878	667	.....	13	924
Sample-exhibitor .....	O. W. Richardson .....	210,362	Nov. 29, 1878	921	269	14	814
Sample-reel .....	A. L. Snyder .....	205,149	June 18, 1878	774	229	13	1122
Sand and earth elevator .....	G. W. Cranston .....	201,753	Mar. 26, 1878	977	299	13	575
Sand, Apparatus for obtaining and washing .....	D. C. Williams .....	206,514	July 30, 1878	1211	348	14	178
Sand from water, Apparatus for separating .....	E. S. Bennett .....	203,104	Apr. 30, 1878	1345	391	13	798
Sand-molding machine .....	W. Aikin and W. W. Drummond .....	202,322	Apr. 16, 1878	510	149	13	679
Sand-paper roll .....	P. Dillon and F. Tracy .....	209,871	Nov. 12, 1878	368	110	14	734
Sand-paper roll .....	C. R. Rathbun and F. W. Adams .....	202,119	Apr. 9, 1878	279	82	13	643
Sand-paperying machine .....	A. Bridgman .....	209,648	Nov. 5, 1878	126	37	14	698
Sand-paperying machine .....	C. Brückner .....	210,988	Dec. 17, 1878	682	188	14	923
Sand-paperying machine .....	J. Taylor .....	207,691	Sept. 3, 1878	107	32	14	362
Sand-paperying polishing-machine .....	H. A. Buchelder .....	210,287	Nov. 26, 1878	837	246	14	803
Sandal .....	J. G. Cunningham .....	204,483	June 4, 1878	63	21	13	1021
Sandal .....	A. M. Woodhull .....	202,209	Apr. 9, 1878	372	109	13	655
Sash and frame, Sky-light .....	J. L. Cox .....	207,019	Aug. 13, 1878	380	117	14	257
Sash-balance .....	W. K. Azbill .....	202,324	Apr. 16, 1878	512	150	13	679
Sash-balance .....	C. Eissmann .....	210,904	Dec. 17, 1878	590	163	14	917
Sash-balance .....	H. F. Bond .....	205,944	July 16, 1878	546	155	14	87
Sash-balance .....	C. T. Brittain .....	210,401	Dec. 3, 1878	10	3	14	826
Sash-balance .....	E. Eberly .....	204,660	June 11, 1878	243	76	13	1050
Sash-balance .....	W. E. Kay .....	206,675	Aug. 6, 1878	19	6	14	200
Sash-balance .....	C. Messenger .....	198,896	Jan. 1, 1878	176	50	13	36
Sash-balance .....	F. L. Shinkle and D. F. Stambaugh .....	201,055	Mar. 5, 1878	235	74	13	451
Sash-balance .....	M. J. Tresch and H. F. Urey .....	205,514	July 2, 1878	53	16	14	16
Sash-balance and lock .....	J. B. Kayner and E. G. Burr .....	204,374	May 28, 1878	1243	353	13	1000
Sash-cord fastener .....	S. J. Joyce .....	208,606	Oct. 1, 1878	152	44	14	509
Sash-cord guide .....	T. Van Wagoner .....	202,492	Apr. 16, 1878	473	197	13	702
Sash, Double-window .....	H. Barth .....	205,825	July 9, 1878	407	116	14	64
Sash-fastener .....	J. G. Beecher .....	201,983	Mar. 19, 1878	593	182	13	518
Sash-fastener .....	J. C. Brannon .....	206,529	July 30, 1878	1224	352	14	179
Sash-fastener .....	J. Broughton .....	204,794	June 11, 1878	390	116	13	1068
Sash-fastener .....	W. H. Coffman and M. Havens .....	206,684	Aug. 6, 1878	7	3	14	207
Sash-fastener .....	I. Cogswell .....	199,265	Jan. 15, 1878	570	166	13	104
Sash-fastener .....	S. Cole .....	198,795	Jan. 1, 1878	78	21	13	19
Sash-fastener .....	O. R. Cooke .....	202,152	Apr. 9, 1878	311	93	13	648
Sash-fastener .....	O. R. Cooke .....	202,154	Apr. 9, 1878	314	93	13	648
Sash-fastener .....	W. T. Doremus .....	199,194	Jan. 8, 1878	499	147	13	94
Sash-fastener .....	W. T. Doremus .....	201,655	Mar. 26, 1878	885	270	13	561
Sash-fastener .....	O. F. Fogelstrand and W. E. Sparks .....	206,940	Aug. 13, 1878	306	93	14	243
Sash-fastener .....	J. Gérard .....	211,005	Dec. 17, 1878	701	193	14	939
Sash-fastener .....	L. S. Gibson .....	202,254	Apr. 9, 1878	420	122	13	662
Sash-fastener .....	B. B. Hughes .....	208,821	Oct. 8, 1878	392	112	14	549
Sash-fastener .....	J. W. Johnson .....	209,894	Nov. 12, 1878	389	116	14	737

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Sash-fastener.....	J. M. Keech.....	204, 051	May 21, 1878	881	252	13	951
Sash-fastener.....	M. L. Kingsley.....	202, 273	Apr. 9, 1878	440	128	13	665
Sash-fastener.....	L. W. Knight.....	205, 278	June 25, 1878	917	272	13	1146
Sash-fastener.....	B. Lander.....	200, 583	July 30, 1878	1284	369	14	187
Sash-fastener.....	A. W. Lozier.....	199, 916	Feb. 5, 1878	81	10	13	327
Sash-fastener.....	F. Marten.....	205, 405	June 25, 1878	1053	312	13	1163
Sash-fastener.....	J. S. Matthews and A. Petersohn.	206, 542	July 23, 1878	1008	287	14	148
Sash-fastener.....	M. McComb.....	199, 920	Feb. 5, 1878	84	11	13	228
Sash-fastener.....	J. B. Morris.....	205, 568	July 2, 1878	111	32	14	23
Sash-fastener.....	C. W. Penfield.....	201, 942	Apr. 2, 1878	80	23	13	610
Sash-fastener.....	S. Root.....	208, 124	Sept. 17, 1878	587	174	14	432
Sash-fastener.....	W. D. Roper and J. W. Mitchell	210, 053	Nov. 19, 1878	572	172	14	765
Sash-fastener.....	C. E. Steller.....	198, 861	Jan. 1, 1878	139	40	13	30
Sash-fastener.....	C. E. Steller.....	206, 636	July 30, 1878	1333	383	14	193
Sash-fastener.....	J. W. Thomas.....	210, 167	Nov. 19, 1878	695	207	14	781
Sash-fastener.....	N. Thompson.....	207, 915	Sept. 10, 1878	357	108	14	397
Sash-fastener.....	W. Winkel.....	209, 785	Nov. 12, 1878	277	83	14	722
Sash-fastener.....	I. N. Wood and A. Morton.....	200, 236	Feb. 12, 1878	350	104	13	296
Sash-fastener.....	J. F. Zimmermann.....	205, 166	June 18, 1878	728	234	13	1124
Sash-holder.....	G. H. Earnest.....	204, 659	June 11, 1878	242	76	13	1050
Sash-holder.....	G. W. Griffin, Jr.....	201, 408	Mar. 19, 1878	623	190	13	520
Sash-holder.....	R. D. MacLennan.....	201, 620	Mar. 26, 1878	853	259	13	556
Sash-holder.....	B. F. Reynolds and C. D. Wiley	211, 049	Dec. 17, 1878	764	210	14	937
Sash-holder.....	J. F. Severance.....	202, 380	Apr. 16, 1878	567	166	13	687
Sash-holder.....	E. E. Shepard.....	201, 956	Apr. 2, 1878	91	26	13	612
Sash-holder.....	S. S. Spear.....	205, 005	June 18, 1878	628	184	13	1102
Sash-holder.....	C. E. Steller.....	206, 634	July 30, 1878	1332	383	14	192
Sash-holder.....	W. J. Way.....	201, 315	Mar. 12, 1878	512	157	13	486
Sash-holder.....	J. W. and W. W. Wharf.....	205, 455	June 25, 1878	1102	326	13	1170
Sash-holder.....	H. Worthington.....	203, 232	Apr. 30, 1878	1481	433	13	815
Sash-holder.....	W. D. Wright.....	206, 383	July 23, 1878	1055	303	14	153
Sash-holder.....	J. B. Yeagley.....	205, 517	July 2, 1878	56	17	14	16
Sash holder and lock.....	E. Tobin, Jr.....	204, 691	June 11, 1878	277	86	13	1055
Sash-lock.....	W. M. Griscom.....	205, 076	June 18, 1878	608	207	13	1111
Sash-lock.....	G. B. Sarchet.....	204, 096	May 21, 1878	931	266	13	957
Sash, Window.....	G. W. Dickinson.....	202, 247	Apr. 9, 1878	415	120	13	641
Sash, Window.....	I. T. Dyer.....	203, 820	May 21, 1878	639	180	13	920
Sash, Window.....	S. R. Easton.....	207, 801	Sept. 10, 1878	232	78	14	361
Sash, Window.....	J. L. Joyce.....	205, 101	June 18, 1878	721	215	13	1115
Sash, Window.....	A. Rudolph.....	207, 305	Aug. 20, 1878	683	203	14	290
Satchel, Folding.....	A. McKinnon.....	202, 850	Apr. 23, 1878	1086	310	13	760
Satchel frame.....	A. F. H. Goepel.....	200, 135	Feb. 12, 1878	253	76	13	281
Satchel-handle.....	G. Havell.....	200, 530	Feb. 19, 1878	657	194	13	350
Satchel lock.....	W. Roemer.....	208, 541	Oct. 1, 1878	85	25	14	500
Satchel, traveling-bag, &c.....	I. Scheuer.....	199, 229	Jan. 15, 1878	530	156	13	99
Satchels, Safety attachment for hand.....	W. R. Hunter.....	203, 735	May 14, 1878	536	152	13	900
Sausage-stuffer.....	H. J. Bachtel.....	204, 521	June 4, 1878	94	32	13	1026
Saw.....	C. W. Hubbard.....	209, 810	Nov. 12, 1878	304	91	14	725
Saw.....	R. E. Poindexter.....	204, 369	May 28, 1878	1238	352	13	1000
Saw, Band.....	J. Krass.....	205, 876	July 9, 1878	460	131	14	71
Saw, Circular.....	J. F. Milligan.....	199, 851	Jan. 29, 1878	1185	348	13	216
Saw, Circular.....	J. F. Milligan.....	199, 852	Jan. 29, 1878	1185	348	13	216
Saw, Circular.....	G. F. and D. Simonds and A. A. Marshall	207, 450	Aug. 27, 1878	850	251	14	325
Saw cleaner, Cotton-gin.....	J. C. Drake.....	208, 468	Oct. 1, 1878	16	4	14	491
Saw cleaner, Cotton-gin.....	R. S. Munger.....	202, 744	Apr. 23, 1878	970	279	13	745
Saw cleaner, Cotton-gin.....	H. A. Walker.....	201, 724	Mar. 26, 1878	950	291	13	571
Saw, Drag.....	W. W. Giles.....	208, 472	Oct. 1, 1878	19	5	14	491
Saw, Drag.....	F. Mayrhofer.....	205, 197	June 25, 1878	837	248	13	1135
Saw-file holder and gage.....	G. W. Atkins.....	210, 076	Nov. 19, 1878	600	179	14	708
Saw filer, Gin.....	E. L. Harris.....	203, 338	May 7, 1878	106	31	14	834
Saw-filing machine.....	D. K. Allington.....	209, 849	Nov. 12, 1878	347	104	14	731
Saw-filing machine.....	J. Coston.....	210, 299	Nov. 26, 1878	849	250	14	805
Saw-filing machine.....	L. A. Hays.....	203, 616	May 14, 1878	410	117	13	884
Saw-filing machine.....	T. N. Jordan.....	209, 404	Oct. 29, 1878	1046	304	14	649
Saw-filing machine.....	O. W. Le Mar.....	199, 453	Jan. 22, 1878	750	223 } 224 }	13	143
Saw-filing machine.....	W. T. Smith.....	203, 383	May 7, 1878	154	44, 45 }	13	841
Saw filing machine, Gin.....	A. S. Eastham.....	207, 957	Sept. 10, 1878	401	121 } 122 }	14	403
Saw-frame.....	E. Andrews.....	206, 760	Aug. 6, 1878	104	33	14	220
Saw frame, Bracket.....	C. Spring and J. T. Robinson	205, 066	June 18, 1878	629	185	13	1102
Saw frame, Buck.....	W. Hankin, sr.....	200, 784	Aug. 6, 1878	133	42	14	225
Saw frame, Buck.....	A. Holbrook.....	200, 612	Feb. 26, 1878	758	222	13	373
Saw-gage.....	C. A. Hurlburt.....	203, 359	Oct. 29, 1878	1041	303	14	648
Saw-grinding machine.....	S. Bevan.....	203, 993	May 21, 1878	820	235	13	943
Saw-guide.....	F. Clark.....	201, 498	Mar. 19, 1878	706	215	13	532
Saw-guide.....	J. Griffin.....	209, 807	Nov. 12, 1878	301	90	14	725
Saw guide, Band.....	J. A. Wells.....	209, 308	Oct. 29, 1878	1014	295	14	645
Saw guide, Circular.....	J. Casson.....	210, 403	Dec. 3, 1878	12	4, 5	14	8, 6
Saw-gummer.....	G. Mercer.....	204, 749	June 11, 1878	338	102	13	1062
Saw-gummer.....	H. C. Strong.....	207, 456	Aug. 27, 1878	856	253	14	326
Saw, Hand.....	W. Berncy.....	207, 159	Aug. 20, 1878	531	160	14	280
Saw, Hand.....	J. R. Woodrough.....	202, 500	Apr. 16, 1878	680	199	13	703
Saw-handle.....	E. M. Boynton.....	200, 165	Feb. 12, 1878	285	85	13	285
Saw handle, Crosscut.....	H. Barron.....	208, 506	Oct. 1, 1878	50	16	14	496
Saw handle, Crosscut.....	R. F. Sprague.....	201, 298	Mar. 12, 1878	490	150	13	494
Saw handle, Crosscut.....	M. E. True.....	206, 908	Aug. 13, 1878	278	84	14	244
Saw-handles, Attaching.....	R. Crosby.....	206, 540	July 30, 1878	1234	355	14	181
Saw-mill appliance.....	R. E. Gleason.....	207, 267	Aug. 20, 1878	647	192	14	294
Saw-mill carriage.....	H. Groves.....	203, 908	May 21, 1878	730	209	13	932
Saw-mill carriage.....	M. Taplin.....	204, 394	May 28, 1878	1280	360	13	1003
Saw-mill carriage attachment.....	A. J. McCollum and T. Seely	199, 084	Jan. 8, 1878	371	110	13	74
Saw mill, Circular.....	H. Atkinson.....	204, 782	June 11, 1878	378	113	13	1067
Saw mill, Circular.....	F. C. Frost.....	200, 448	Feb. 19, 1878	578	170	13	338

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Saw mill, Circular.....	W. Thompson, J. Dickey, and N. P. Watts.	205,924	July 9, 1878	513	145	14	77
Saw-mill dog.....	D. Lane.....	203,469	May 7, 1878	247	71	13	854
Saw-mill dog.....	C. J. Leach.....	199,213	Jan. 15, 1878	517	152	13	96
Saw-mill dog.....	B. D. Whitney.....	199,387	Jan. 22, 1878	700	205	13	133
Saw-mill head-block.....	W. H. Abrams.....	201,376	Mar. 19, 1878	588	180	13	515
Saw-mill head-block.....	J. Brett and B. Perry.....	204,192	May 28, 1878	1060	{ 301 302 }	{ 13 13 }	977
Saw-mill head-block.....	A. S. Richards.....	201,199	Mar. 12, 1878	379	117	13	479
Saw-mill head-block.....	J. S. Scofield.....	200,940	Mar. 5, 1878	117	39	13	433
Saw-mill head-block.....	B. E. Sergeant.....	210,567	Dec. 3, 1878	195	52	14	848
Saw-mill head-block.....	E. H. Stearns.....	199,667	Jan. 29, 1878	1012	295	13	190
Saw-mill head-block.....	B. D. Whitney.....	199,386	Jan. 22, 1878	699	205	13	133
Saw-mills, Jack-chain for.....	J. B. Lemieux.....	208,321	Sept. 24, 1878	813	237	14	464
Saw-mills, Log-carriage gear for.....	W. Lamb.....	203,467	May 7, 1878	245	71	13	854
Saw, Scroll.....	G. W. Griffin.....	210,421	Dec. 3, 1878	33	7	14	828
Saw-set.....	G. W. Atkins.....	201,481	Mar. 19, 1878	689	211	13	529
Saw-set.....	F. A. Buell.....	209,222	Oct. 22, 1878	856	248	14	619
Saw-set.....	J. F. Fields.....	200,040	Feb. 5, 1878	148	48	13	256
Saw-set.....	W. C. Wheeler.....	199,338	Jan. 15, 1878	641	187	13	116
Saw-sharpener.....	T. H. McCray.....	208,024	Sept. 17, 1878	487	145	14	419
Saw-sharpener.....	W. M. Watson.....	204,402	May 28, 1878	1269	{ 361 362 }	{ 13 13 }	1004
Saw sharpener, Gin.....	W. H. Walsh.....	207,019	Sept. 10, 1878	362	110	14	398
Saw-sharpening machine.....	T. Hodgson.....	201,416	Mar. 19, 1878	628	192	13	520
Saw-sharpening machine.....	J. A. Miller.....	201,271	Mar. 12, 1878	458	141	13	490
Saw-sharpening machine.....	J. Wagner.....	202,309	Apr. 9, 1878	476	139	13	670
Saw-sawge.....	S. Kinney.....	210,127	Nov. 19, 1878	652	193	14	775
Saw-teeth, Manufacture of.....	N. W. Spaulding.....	205,311	June 25, 1878	957	{ 283 284 }	{ 13 13 }	1151
Saw-teeth, Securing insertible.....	N. Johnson.....	200,833	Mar. 5, 1878	20	7, 8	13	418
Saw-tooth.....	C. Adams.....	204,697	June 11, 1878	281	87	13	1055
Saw-tooth.....	W. E. Brooke.....	205,042	June 18, 1878	663	195	13	1107
Saw-tooth.....	J. R. Luce.....	211,029	Dec. 17, 1878	737	201	14	934
Saw-tooth.....	W. P. Miller.....	211,035	Dec. 17, 1878	745	204	14	935
Saw-tooth, Insertible.....	J. L. Berry.....	207,003	Aug. 13, 1878	366	112	14	255
Saw-tooth, Insertible.....	S. J. Randall and J. O'Brien.....	200,219	Feb. 12, 1878	332	100	13	293
Saw-tooth, Insertible.....	F. Schley.....	209,627	Nov. 5, 1878	99	29	14	694
Saw-tooth sawge.....	N. W. Spaulding.....	200,097	Feb. 5, 1878	207	65	13	265
Saws, Apparatus for hardening and tempering.....	S. E. Farmer.....	199,968	Feb. 5, 1878	78	25	13	245
Saws, Fastening the ends of band.....	O. Pratt.....	201,444	Mar. 19, 1878	655	199	13	524
Saws, Hanging circular.....	H. Kean and J. G. Alexander.....	207,810	Sept. 10, 1878	242	75	14	383
Saws, Hanging gang.....	C. Lamb.....	210,787	Dec. 10, 1878	435	121	14	889
Saws, Machine for manufacturing circular.....	W. E. Nickerson.....	199,308	Jan. 15, 1878	610	178	13	111
Saws-dust, Mechanism for removing.....	M. Hay.....	205,548	July 2, 1878	88	25	14	20
Sawing logs, Machine for spirally.....	S. T. Moffett.....	203,182	Apr. 30, 1878	1430	418	13	809
Sawing-machine.....	W. Dixon and B. W. Records.....	200,899	Mar. 5, 1878	81	28	13	428
Sawing-machine.....	T. Mosburn.....	200,751	Feb. 26, 1878	903	266	13	395
Sawing-machine.....	E. Smith.....	206,839	Aug. 6, 1878	187	59	14	229
Sawing-machine.....	E. F. Wilcox.....	206,512	July 30, 1878	1210	347	14	177
Sawing machine, Circular.....	J. Connell.....	210,100	Nov. 12, 1878	626	186	14	772
Sawing machine, Circular.....	C. H. Jones.....	200,542	Feb. 19, 1878	668	197	13	351
Sawing machine, Circular.....	G. Schleicher.....	202,668	Apr. 23, 1878	894	{ 256 257 }	{ 13 13 }	736
Sawing machine, Circular.....	C. W. Shibley and E. P. Wright.....	206,838	Aug. 6, 1878	186	59	14	229
Sawing machine, Drag.....	J. Alexander.....	203,692	May 14, 1878	491	139	13	894
Sawing machine, Drag.....	D. Gates.....	204,809	June 11, 1878	405	119	13	1070
Sawing machine, Drag.....	D. Miller and W. H. Johnson.....	204,836	June 11, 1878	438	128	13	1073
Sawing machine, Drag.....	A. Ransome.....	206,404	July 30, 1878	1094	313	14	163
Sawing-machine gage.....	O. Bonney, jr.....	198,963	Jan. 8, 1878	253	72	13	55
Sawing machine, Scroll.....	W. F. and J. Barnes.....	207,640	Sept. 3, 1878	59	17, 18	14	356
Sawing machine, Scroll.....	H. L. Beach.....	209,153	Oct. 22, 1878	788	229	14	610
Sawing machine, Scroll.....	J. H. Hopkins.....	210,607	Dec. 10, 1878	248	68	14	805
Sawing machine, Scroll.....	R. McChesney.....	199,845	Jan. 29, 1878	1180	346	13	215
Sawing machine, Scroll.....	B. Merritt.....	208,411	Sept. 24, 1878	903	204	14	476
Scaffold.....	R. T. Roadell.....	208,852	Oct. 8, 1878	431	125	14	554
Scaffold.....	J. A. Russell.....	208,337	Sept. 24, 1878	829	242	14	466
Scaffold-bracket fastening.....	R. R. Cooley and A. W. A. Winsor.....	202,998	Apr. 30, 1878	1244	360	13	785
Scaffold, Ladder.....	W. Kyle.....	198,947	Jan. 8, 1878	237	68	13	52
Scale and counterfeit-coin detector, Postal.....	H. Maranville.....	203,057	Apr. 30, 1878	1300	377	13	792
Scale-beam.....	H. L. Grisell.....	207,735	Sept. 3, 1878	154	47	14	368
Scale-beam.....	A. B. Pearson.....	203,290	May 7, 1878	60	18	13	828
Scale-beam.....	J. Weeks.....	204,177	May 28, 1878	1037	295	13	974
Scale-beams, Device for notching.....	H. Fairbanks.....	205,847	July 9, 1878	427	122	14	67
Scale-platform.....	F. Fairbanks.....	199,811	Jan. 29, 1878	1148	337	13	211
Scales, Bale-weighing.....	G. R. Williams.....	201,972	Apr. 2, 1878	110	32	13	615
Scales, Chromatic tempering.....	J. Rose and P. Benjamin.....	205,578	July 2, 1878	122	36	14	24
Scales, Drop-lever weighing.....	F. Fairbanks.....	208,300	Sept. 24, 1878	793	231	14	461
Scales for weighing pasteboard.....	F. Fairbanks and T. Spooner.....	198,877	Jan. 1, 1878	161	45	13	33
Scales for weighing, Spring.....	J. A. and J. S. George.....	200,708	Feb. 26, 1878	862	253	13	388
Scales, Pendulum weighing.....	N. H. Putney.....	198,815	Jan. 1, 1878	95	26	13	22
Scales, Platform.....	S. J. Austin.....	200,663	Feb. 26, 1878	835	245	13	394
Scales, Platform.....	J. P. Chatillon.....	203,589	May 14, 1878	389	110	13	881
Scales, Platform.....	W. B. Daniels.....	199,356	Jan. 22, 1878	671	197	13	128
Scales, Platform.....	F. Fairbanks.....	206,428	July 30, 1878	1120	321	14	166
Scales, Platform.....	A. B. Pearson.....	200,406	Feb. 19, 1878	535	158	13	331
Scales, Platform.....	L. G. Spencer.....	203,563	May 14, 1878	367	103	13	879
Scales, Platform weighing.....	T. Fairbanks.....	205,623	July 2, 1878	164	49	14	30
Scales, Platform weighing.....	J. F. Milligan.....	207,762	Sept. 3, 1878	182	56	14	372
Scales, Sack.....	S. F. Schweitzer and G. Kinsey.....	202,057	Apr. 2, 1878	196	57	13	626
Scales, Shirt.....	N. N. Sprecher and I. B. Keller.....	202,479	Apr. 16, 1878	661	194	13	701
Scales, Spring.....	T. C. Miles.....	209,180	Oct. 22, 1878	817	236	14	614
Scales, Spring.....	W. B. and J. S. Ross.....	200,765	Feb. 26, 1878	915	269	13	396
Scales, Spring weighing.....	L. E. Brown.....	210,493	Dec. 3, 1878	105	27	14	837
Scales, Weighing.....	C. Becker.....	199,776	Jan. 29, 1878	1111	386	13	205
Scales, Weighing.....	C. Berst.....	201,984	Apr. 2, 1878	122	35	13	617

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Scales, Weighing	H. S. Cochran	205,354	June 25, 1878	1005	297	13	1187
Scales, Weighing	G. W. Craig	204,888	June 18, 1878	512	140	13	1207
Scales, Weighing	F. Fairbanks	203,902	May 21, 1878	721	207	13	921
Scales, Weighing	T. Fairbanks	202,800	Apr. 23, 1878	1020	295	13	795
Scales, Weighing	T. Fairbanks	207,263	Aug. 20, 1878	644	191	14	299
Scales, Weighing	J. L. Follett	201,604	Mar. 26, 1878	837	254	13	895
Scales, Weighing	C. A. Fredericks	200,386	Feb. 19, 1878	518	153	13	929
Scales, Weighing	C. A. Fredericks	205,850	July 9, 1878	481	123	14	57
Scales, Weighing	B. F. Rogers	205,684	July 2, 1878	237	70	14	30
Scales, Weighing	T. H. Ward	208,444	Sept. 24, 1878	980	275	14	600
Scales, Weighing	H. Willard	204,869	June 11, 1878	471	137	13	1207
Scarf	M. Henschel	208,093	Sept. 17, 1878	551	105	14	438
Scarf	C. W. Lyford	200,210	Feb. 12, 1878	325	97	13	232
Scarf	C. C. and D. W. Noyes	208,486	Oct. 1, 1878	32	10	14	400
Scarf-fastening	H. Sandner	204,909	June 18, 1878	624	153	13	1181
Scarf-ring	R. Waterhouse	201,577	Mar. 19, 1878	792	241	13	895
Scintillator for lighting tinder-cord	W. W. Batchelder	204,284	May 23, 1878	1147	323	13	920
Scissors	G. Conover	208,467	Oct. 1, 1878	15	4	14	400
Scissors	T. R. Wright	201,475	Mar. 19, 1878	685	200	13	829
Scissors, forceps, &c	L. A. Pichon	200,754	Feb. 26, 1878	906	267	13	895
Scissors-sharpener	W. H. Barwick	207,339	Aug. 27, 1878	731	219	14	211
Scoop	A. Button	203,885	May 21, 1878	701	200	13	895
Scoop	W. C. Freeman	206,011	July 16, 1878	615	177	14	35
Scoop	I. Pierce	208,199	Sept. 17, 1878	985	196	14	423
Scoop, measure, and sieve, Flour and meal	C. C. Tittle	201,301	Mar. 12, 1878	493	152	13	495
Scourer:							
See Bran-scourer.	Knife-scourer.						
Scouring-board	G. W. Curry	207,257	Aug. 20, 1878	637	190	14	299
Scow, Dumping	P. L. Murphy	203,185	Apr. 30, 1878	1435	419	13	895
Scow, Reversible dumping	C. C. Overton	208,629	Oct. 1, 1878	175	51	14	512
Scraper	G. Eiteman	209,389	Oct. 29, 1878	1033	309	14	600
Scraper, Earth	J. H. Edmondson	204,142	May 28, 1878	960	234	13	895
Scraper, Earth	J. H. Edmondson	209,964	Nov. 10, 1878	479	144	14	702
Scraper, Earth	B. Slusser	201,057	Mar. 5, 1878	237	75	13	400
Scraper, Earth	B. Slusser	208,720	Nov. 5, 1878	196	59	14	707
Scraper, Revolving earth	B. Slusser	201,058	Mar. 5, 1878	238	75	13	400
Scraper, Road	J. Fleming	198,880	Jan. 1, 1878	163	46	13	34
Scraper, Road	H. C. Moore	207,977	Sept. 10, 1878	422	137	14	400
Scraper, Road	S. G. L. Morrow	205,290	June 25, 1878	934	277	13	1187
Scraper, Road	L. Ruggles	200,151	Feb. 12, 1878	269	80	13	232
Scraper, Road	J. Stubbs	199,756	Jan. 29, 1878	1092	320	13	895
Scraper, Road	P. B. Thaxton	210,726	Dec. 10, 1878	373	102	14	500
Scraper, Road	F. T. Wilson and G. W. Hall	205,937	July 9, 1878	524	154	14	70
Scraper, Sulky	S. S. Terwilliger	202,484	Apr. 16, 1878	666	195	13	702
Scraper, Sulky road	N. D. Edmondson	202,423	Apr. 16, 1878	609	178	13	895
Scraper, Vehicle-wheel	M. Robbins	202,872	Apr. 23, 1878	1110	318	13	702
Scrapping tool	L. F. A. Legouge	202,444	Apr. 16, 1878	631	184	13	400
Screen:							
See Coal and potato screen.	Portable screen.						
Grain-screen.	Window-screen.						
Paper-pulp screen.							
Screen	J. H. Cavanagh	200,438	Feb. 19, 1878	508	168	13	300
Screen	G. F. Halley	204,147	May 28, 1878	1005	295	13	895
Screw cap and stopper fastener	J. K. Chase	208,010	Sept. 17, 1878	473	143	14	407
Screw-cutting die	J. J. Grant, N. Sawyer, and F. N. Gardner	204,028	May 21, 1878	963	245	13	895
Screw-cutting die	M. C. Johnson	201,790	Mar. 26, 1878	1017	311	13	895
Screw-cutting die	O. Pederson	209,774	Nov. 12, 1878	297	79	14	702
Screw-cutting die	G. R. Stetson	203,056	May 21, 1878	783	224	13	895
Screw-cutting die	F. E. and F. O. Wells	199,673	Jan. 29, 1878	1019	297	13	895
Screw-cutting die and holder	J. H. Vinton	208,870	Oct. 8, 1878	450	130	14	895
Screw-cutting-die holder	J. F. Brinckmann	199,408	Jan. 22, 1878	721	212	13	895
Screw-cutting-die stock	T. H. Rose	207,446	Aug. 27, 1878	846	250	14	895
Screw-cutting stock and tool	E. P. Bavielle	206,920	Aug. 13, 1878	288	87	14	895
Screw-driver	W. L. Gilchrist	198,935	Jan. 8, 1878	226	64	13	30
Screw-driver	R. S. Gladding	204,812	June 11, 1878	408	119	13	895
Screw-driver	R. Munroe	200,747	Feb. 26, 1878	900	264	13	895
Screw-driver	J. B. West	201,372	Mar. 19, 1878	582	170	13	514
Screw driver, Ratchet	G. E. Gay	210,942	Dec. 17, 1878	628	174	14	922
Screw-machine	C. D. Rogers	211,053	Dec. 17, 1878	768	211	14	922
Screw machine, Metal	C. D. Rogers	203,946	May 21, 1878	765	221	13	897
Screw machine, Chuck for metal	E. Parker and H. K. Jones	210,221	Nov. 26, 1878	767	228	14	794
Screw-stock	P. Everitt	210,106	Nov. 19, 1878	631	187	14	773
Screw-swaging machine	M. D. Luehrs	204,907	June 18, 1878	530	155	13	1009
Screw-tap, Collapsible	J. M. Johnson	198,945	Jan. 8, 1878	226	67	13	53
Screw-threading machine	F. P. Sheldon	203,500	May 14, 1878	363	102	13	878
Screw-threads, Device for cutting	M. Minahan	202,362	Apr. 16, 1878	549	161	13	694
Screw-threads, Die for cutting	M. C. Johnson	204,048	May 21, 1878	878	251	13	950
Screw-threads in sheet-metal, Machine for forming	A. R. King and J. Dougherty	210,784	Dec. 10, 1878	432	120	14	899
Screw, Wood	G. C. Armstrong	205,990	July 16, 1878	584	171	14	90
Screw, Wood	H. C. Stone	200,104	Feb. 5, 1878	214	67	13	206
Screws, Machine for making metal	L. W. Stockwell	200,155	Feb. 12, 1878	271	81, 82	13	233
Screws, Machine for making metal	L. W. Stockwell	210,165	Nov. 19, 1878	690	205, 206	14	781
Scrubber, Floor	F. A. Balch	206,212	July 23, 1878	853	243	14	129
Scrubbing device	A. J. Davis	207,108	Aug. 20, 1878	485	145	14	274
Scrubbing-machine	A. F. Stockley	199,875	Jan. 29, 1878	1204	354	13	219
Scythe-fastener	W. H. Kretzinger	203,106	Apr. 30, 1878	1416	413	13	897
Scythe-fastening	C. T. Beebe	201,905	Apr. 2, 1878	47	12	13	695
Scythe-fastening	A. W. Flanders	207,409	Aug. 27, 1878	805	238	14	320
Scythe-fastenings, Claw-socket for	C. T. Beebe	201,218	Mar. 12, 1878	401	123	13	483
Scythe-snath fastener	J. Simpson	210,716	Dec. 10, 1878	361	99	14	879



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Scythe-smath fastening	G. E. Clow	207, 164	Aug. 20, 1878	537	161	14	280
Scythe-smath fastening	M. Hewitt	204, 327	May 28, 1878	1193	340	13	994
Scythe-smath fastening	H. W. Thompson	211, 065	Dec. 17, 1878	782	215	14	940
Seal, Baggage	E. J. Brooks	208, 953	Oct. 15, 1878	552	161	14	574
Seal-bolt	C. H. Hopkins	206, 238	July 23, 1878	879	251	14	132
Seal-fastening	S. Keeler	202, 267	Apr. 9, 1878	433	126	13	664
Seal-lock	H. Ahrend	201, 147	Mar. 12, 1878	333	102	13	472
Seal-lock	E. J. Brooks	203, 996	May 21, 1878	824	236	13	944
Seal-lock	W. Dunn	203, 012	Apr. 30, 1878	1259	365	13	786
Seal-lock	E. Ferret	210, 844	Dec. 17, 1878	506	143	14	907
Seal-lock	F. G. Hunter	204, 226	May 28, 1878	1092	311	13	981
Seal-lock	H. T. Smith and D. W. Vowles	210, 641	Dec. 10, 1878	284	78	14	870
Seal-lock	A. F. Whiting	201, 076	Mar. 5, 1878	254	80	13	453
Seal-lock for packing-boxes	B. S. Atwood	207, 234	Aug. 20, 1878	611	183	14	290
Seal, Metallic	E. J. Brooks	209, 008	Oct. 15, 1878	607	177	14	581
Seal, Metallic	J. Sweeney	207, 567	Aug. 27, 1878	977	287	14	341
Seal-press	S. Larkin	200, 548	Feb. 19, 1878	676	199	13	353
Seals, Machine for compressing and stamping lead	W. D. Doremus	208, 006	Sept. 10, 1878	455	137	14	410
Seals to cars, Attaching	W. S. Brewster	210, 746	Dec. 10, 1878	393	107	14	883
Seals to pipe-joints in distilleries, Device for attaching	A. Georg	210, 198	Nov. 26, 1878	744	220	14	791
Sealed can	A. J. Nolty	201, 939	Apr. 2, 1878	77	22	13	610
Seam-bending machine, Sheet-metal	W. A. Wheeler	210, 382	Nov. 26, 1878	948	275	14	818
Seam for metal ware, Locking	G. Wright	204, 636	June 18, 1878	561	164	13	1093
Seam or joint for cars	H. C. Milligan	205, 119	June 18, 1878	738	220	13	1117
Seam-pressing mechanism	C. W. Collyer	201, 094	Apr. 2, 1878	131	38	13	618
Seams, Machine for cutting out and removing	W. S. Shepherd	203, 203	Apr. 30, 1878	1456	425	13	812
Seams, Machine for pressing	J. G. Griffith	209, 339	Oct. 29, 1878	982	285 } 286 } 287 }	14	640
Seams, Machinery for opening and pressing	J. T. Bruen	208, 458	Oct. 1, 1878	4	1, 2 } 130 }	14	489
Seaming-machine	W. A. Wheeler	208, 872	Oct. 8, 1878	452	131 } 132 }	14	556
Seaming machine, Can	E. R. Bowie	198, 965	Jan. 8, 1878	255	73	13	55
Seaming stove-boilers, Machine for double	T. O'Neill	209, 418	Oct. 29, 1878	1062	308	14	652
Seat:							
See Car-seat.	Vehicle jump-seat.						
Carriage-seat.	Vehicle spring-seat.						
Carriage jump-seat.	Wagon spring-seat.						
Vehicle-seat.	Water-closet seat.						
Seat-spring	C. Kilburn	203, 739	May 14, 1878	539	153	13	900
Seat-spring fastening	Z. Cobb	198, 930	Jan. 8, 1878	221	62	13	50
Sectional boiler	A. W. Cram	210, 013	Nov. 19, 1878	532	160	14	759
Sectional boiler	J. G. Miner	201, 273	Mar. 12, 1878	460	142	13	490
Seed and fertilizer distributor	W. Harper	204, 323	May 28, 1878	1189	339	13	994
Seed-cleaning machine	I. B. Sandusky	200, 410	Feb. 19, 1878	540	159	13	332
Seed-distributor	J. W. Dooley	204, 301	May 28, 1878	1166	332	13	991
Seed-drill	W. T. Hildrup and A. Tschop	208, 599	Oct. 1, 1878	145	42	14	508
Seed-drill	E. Ruhlmann	210, 881	Dec. 17, 1878	551	155	14	912
Seed-drill	O. N. Skaarraas	200, 943	Mar. 5, 1878	120	40	13	434
Seed-drill	W. A. Turner	210, 581	Dec. 3, 1878	212	56	14	851
Seed-drill and corn-planter, Combined	T. J. and D. A. Lindsay and W. J. Miner	210, 262	Nov. 26, 1878	808	239 } 240 }	14	800
Seed-drill and cultivator	D. L. Garver	206, 780	Aug. 6, 1878	125	39	14	222
Seed drill, Cotton	W. E. Kelley	204, 671	June 11, 1878	255	79	13	1052
Seed-drill tooth	H. Springer	203, 207	Apr. 30, 1878	1459	427	13	813
Seed-dropper	I. Allen and H. Chandler	208, 781	Oct. 8, 1878	347	100	14	542
Seed-dropper	S. J. Keim	208, 825	Oct. 8, 1878	397	113	14	549
Seed-dropper	W. W. S. Kime	206, 336	July 23, 1878	1002	285	14	148
Seed-dropper	A. Vannorman	200, 110	Feb. 5, 1878	221	68	13	267
Seed-dropper	J. T. Wright	199, 889	Jan. 29, 1878	1218	358	13	221
Seeder and planter	J. E. Morgan	208, 625	Oct. 1, 1878	169	49	14	512
Seeder, Broadcast	H. H. Monroe	198, 750	Jan. 1, 1878	21	5	13	12
Seeder, cultivator, and grain-drill, Combined broadcast	T. Galloway and J. Larsen	210, 683	Dec. 10, 1878	329	90	14	875
Seeder-teeth, Locking device for	T. Galloway and J. Larsen	208, 014	Sept. 17, 1878	475	143	14	418
Seeding-machine	H. Barsalou	200, 163	Feb. 12, 1878	283	84	13	285
Seeding-machine	J. B. Birge, D. J. Woodard, and G. D. Rowell	203, 529	May 14, 1878	326	92	13	873
Seeding-machine	S. O. Campbell	208, 887	Oct. 15, 1878	475	137	14	564
Seeding-machine	W. K. Evans	208, 469	Oct. 1, 1878	16	5	14	491
Seeding-machine	J. P. Fulgham	208, 588	Oct. 1, 1878	135	39	14	507
Seeding-machine	J. C. Mundel	202, 571	Apr. 16, 1878	772	223	13	713
Seeding-machine	A. P. Steele	205, 312	June 25, 1878	959	284	13	1151
Seeding-machine	J. M. Westcott and J. L. Halteman	201, 578	Mar. 19, 1878	793	241	13	543
Seeding-machine, Force-feed	W. A. Van Brunt and S. E. Davis	208, 652	Oct. 1, 1878	202	57, 58	14	516
Seeding-machines, Sweeper for	M. Barbour	200, 684	Feb. 26, 1878	836	246	13	385
Seesaw	J. B. Tyler	201, 897	Apr. 2, 1878	39	10	13	604
Self-waiting table	O. Wells	206, 845	Aug. 6, 1878	193	61	14	230
Separator:							
See Clover-separator.	Grain-separator.						
Cockle-separator.	Metal-separator.						
Corn-sheller separator.	Middlings-separator.						
Garlic-separator.	Potato-separator.						
Service-box	E. W. Meyer	201, 814	Mar. 26, 1878	1039	317	13	584
Service-tank	J. Foley	210, 515	Dec. 3, 1878	133	35	14	841
Settee, Folding	H. T., L. B., and F. F. Morse	202, 856	Apr. 23, 1878	1090	312	13	761
Sewer and other traps	W. F. Downey	201, 758	Mar. 26, 1878	984	301	13	576
Sewer-check valve	C. Naecher	199, 307	Jan. 15, 1878	609	178	13	111
Sewer-cleaning device	E. M. Chapin	202, 519	Apr. 16, 1878	699	204	13	706
Sewer-gas trap	W. M. Allen	206, 210	July 23, 1878	852	243	14	128
Sewer-gas trap	F. E. Cudell	201, 161	Mar. 12, 1878	345	106	13	474
Sewer-gas trap	F. E. Cudell	201, 391	Mar. 19, 1878	602	184	13	517



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Sewer-gases and consuming same by combustion, Extracting.	B. S. Alexander	210,443	Dec. 3, 1878	55	.....	14	831
Sewer-inlet valve.	J. J. Gorman	208,809	Oct. 8, 1878	382	108	14	547
Sewer openings, Man-hole plate for	D. W. Purcell	202,373	Apr. 10, 1878	561	164	13	668
Sewer-pipes, Device for finishing the sockets of	A. F. Foster	201,342	Mar. 10, 1878	553	170	12	510
Sewer-pipes, Ventilator and overflow for.	W. S. Clark	210,915	Dec. 17, 1878	602	166	14	918
Sewer-trap	J. Clark	207,644	Sept. 3, 1878	64	19	14	357
Sewer-trap	W. F. Downey	207,200	Aug. 20, 1878	640	101	14	232
Sewer-trap	J. Dunn and T. H. Birdsall	202,250	Apr. 9, 1878	417	121	13	661
Sewer-trap	J. L. Knight	201,020	Mar. 5, 1878	198	63	13	445
Sewer-trap	W. A. Pitt	199,100	Jan. 8, 1878	385	115	13	76
Sewer-trap	W. A. Pitt	207,676	Sept. 3, 1878	93	28	14	300
Sewer-trap	J. Sargent	200,573	Feb. 19, 1878	700	206	13	837
Sewer-trap	T. Starbuck and C. P. Small	201,299	Mar. 12, 1878	491	151	13	494
Sewer-trap	J. M. Thatcher	204,397	May 28, 1878	1263	860	13	1003
Sewer-trap	W. Torney and C. N. Tillotson	199,238	Jan. 15, 1878	538	159	13	100
Sewer-trap	C. A. Winship	201,899	Apr. 2, 1878	41	11	13	605
Sewer-trap valve	P. J. Convery	204,135	May 28, 1878	991	282	13	969
Sewer-valve	J. Dikeman	199,696	Jan. 29, 1878	1041	304	13	194
Sewerage connections, Gas and water valve for	W. L. Belt	202,219	Apr. 9, 1878	385	112	13	657
Sewers, &c., Air-valve attachment for	P. F. Morey	209,975	Nov. 10, 1878	491	149	14	754
Sewers, Construction of wooden	A. T. Hermann and W. Sexton	203,341	May 7, 1878	109	32	13	835
Sewing, Book	E. S. Boynton	201,590	Mar. 26, 1878	820	250	13	551
Sewing-chair	G. C. Bovey	210,487	Dec. 3, 1878	98	25	14	837
Sewing-machine	E. E. Bean	209,543	Nov. 5, 1878	5	2	14	681
Sewing-machine	C. K. Bradford	209,157	Oct. 22, 1878	701	230	14	610
Sewing-machine	C. S. Cushman	209,026	Oct. 15, 1878	630	182	14	584
Sewing-machine	J. A. Davis	208,967	Oct. 15, 1878	565	165	14	575
Sewing-machine	F. D. Elderfield	204,429	June 4, 1878	14	5, 6	13	1015
Sewing-machine	L. Evans	209,030	Oct. 15, 1878	634	183	14	584
Sewing-machine	J. L. Follett	203,904	May 21, 1878	727	208	13	922
Sewing-machine	J. L. Follett	203,905	May 21, 1878	728	208	13	922
Sewing-machine	J. A. House	206,239	July 23, 1878	880	251	14	132
Sewing-machine	J. A. House	210,036	Nov. 19, 1878	555	166	14	762
Sewing-machine	T. Lamb	207,044	Aug. 13, 1878	401	125	14	260
Sewing-machine	P. Langlois	201,797	Mar. 26, 1878	1024	313	13	582
Sewing-machine	A. Leavitt	206,029	July 10, 1878	631	182	14	96
Sewing-machine	W. Martin, jr., D. R. Dawson, and R. Orchar.	206,743	Aug. 6, 1878	87	27, 28	14	217
Sewing-machine	J. McCloskey	202,738	Apr. 23, 1878	962	276	13	744
Sewing-machine	L. B. Miller and P. Diehl	208,838	Oct. 8, 1878	416	120	14	552
Sewing-machine	R. W. Morrell, T. and J. Parkinson.	202,857	Apr. 23, 1878	1092	312	13	761
Sewing-machine	C. Necker	208,259	Sept. 24, 1878	749	220	14	456
Sewing-machine	G. Rehfuas	205,904	July 9, 1878	490	140	14	74
Sewing-machine	A. Steward	207,454	Aug. 27, 1878	853	252	14	325
Sewing-machine	W. J. Stewart	205,698	July 2, 1878	252	75	14	40
Sewing-machine	C. F. St. John	205,922	July 9, 1878	509	144	14	77
Sewing-machine	R. H. St. John	207,911	Sept. 10, 1878	352	107	14	397
Sewing-machine	P. Waterston	201,906	Apr. 2, 1878	101	29, 30	13	614
Sewing-machine	W. W. Wells	209,843	Nov. 12, 1878	339	101	14	730
Sewing-machine	J. Wensley	207,230	Aug. 20, 1878	607	182	14	286
Sewing-machine	D. Williamson	206,513	July 30, 1878	1210	347	14	177
Sewing-machine	R. G. Wood	207,928	Sept. 10, 1878	371	113	14	309
Sewing-machine	E. S. Young and G. H. Dimond	206,992	Aug. 13, 1878	353	108	13	253
Sewing-machine attachment	T. D. Emery	206,669	Aug. 6, 1878	11	4	14	208
Sewing-machine attachment	A. P. Holcomb	206,329	July 23, 1878	901	282	14	146
Sewing-machine attachments, Retainer for	G. Hoffuss	200,090	Feb. 5, 1878	201	63	12	364
Sewing-machine, Blind-stitch	C. P. Hoffman and N. Meyers	207,035	Aug. 13, 1878	304	122	14	239
Sewing-machine bobbin-winder	F. A. Meredith	208,410	Sept. 24, 1878	902	264	14	478
Sewing-machine bobbin-winder	J. C. White	206,375	July 23, 1878	1045	300	14	152
Sewing-machine, Book	E. S. Boynton	203,530	May 14, 1878	327	92, 93	13	874
Sewing-machine, Book	J. S. Lever	209,061	Oct. 15, 1878	675	194	14	509
Sewing-machine, Boot and shoe	L. R. Blake	201,987	Apr. 2, 1878	124	36, 37	13	617
Sewing-machine, Boot and shoe	L. R. Blake	207,340	Aug. 27, 1878	731	219	14	311
Sewing-machine, Boot and shoe	C. Dancel	199,802	Jan. 29, 1878	1140	335	13	210
Sewing-machine, Boot and shoe	H. C. Gros	206,317	July 23, 1878	973	277	14	144
Sewing-machine, Broom	G. F. McCombs	208,407	Sept. 24, 1878	806	262	14	475
Sewing-machine, Broom	C. Palmer	202,749	Apr. 23, 1878	977	281	13	746
Sewing-machine, Broom	L. Varicas	204,864	June 11, 1878	462	135	13	1077
Sewing-machine, Button-hole	T. S. L. Howard	199,206	Jan. 15, 1878	511	150	13	96
Sewing-machine, Button-hole	E. Moreau	204,873	June 11, 1878	477	138	13	1078
Sewing-machine button-hole attachment	S. J. Baird	206,768	Aug. 6, 1878	111	35, 36	14	229
Sewing-machine button-hole attachment	G. F. Hildenbrand and P. J. Eckes	204,572	June 4, 1878	139	47	13	1032
Sewing-machine button-hole attachment	G. M. Morris and J. P. Hollenbeck.	203,287	May 7, 1878	54	16, 17	13	828
Sewing-machine button-hole-stitching attachment	A. H. Tait, jr.	210,370	Nov. 26, 1878	931	271	14	816
Sewing-machine chair	F. Chichester	200,508	Feb. 19, 1878	633	186	13	346
Sewing-machine chair	S. D. Granger	199,535	Jan. 22, 1878	852	249	13	157
Sewing-machine chair	T. Lanston	204,157	May 28, 1878	1016	289	13	971
Sewing-machine cutting attachment	D. J. Tapley	205,315	June 25, 1878	963	283	13	1151
Sewing-machine darning attachment	R. M. Rose	199,215	Jan. 15, 1878	620	180	13	112
Sewing-machine driving attachment	G. Bell	204,913	June 18, 1878	570	166	13	1094

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Sewing-machine embroidering attachment	G. E. Hart	200,452	Feb. 19, 1878	581	171	13	338
Sewing-machine fan attachment	J. W. Fackler	209,116	Oct. 22, 1878	749	218	14	605
Sewing-machine feed mechanism	A. Burgess	204,533	June 4, 1878	103	35	13	1027
Sewing-machine feed-operating mechanism	T. K. Keith	204,579	June 4, 1878	148	49	13	1034
Sewing-machine feeding mechanism	T. K. Keith	198,915	Jan. 1, 1878	199	56	13	39
Sewing-machine feeding mechanism, Button-hole	W. J. Martin	203,173	Apr. 30, 1878	1424	416	13	808
Sewing-machine fly-wheel	A. Decker	204,954	June 18, 1878	579	169	13	1096
Sewing machine, Glove	C. M. Boland	202,695	Apr. 23, 1878	922	{ 263 264 }	13	739
Sewing-machine guide	G. M. Peters	205,675	July 2, 1878	226	67	14	37
Sewing-machine hem-stitching attachment	J. A. Lakin	208,911	Oct. 15, 1878	502	145	14	567
Sewing-machine motor	J. Haworth	203,035	Apr. 30, 1878	1282	371	13	790
Sewing-machine motor	I. E. Myrick	201,040	Mar. 5, 1878	220	69, 70	13	449
Sewing-machine needle	A. C. Carey	205,243	June 25, 1878	886	262	13	1141
Sewing-machine needle	W. C. Cross	202,237	Apr. 9, 1878	402	117	13	660
Sewing-machine needle-bar	W. Cook and S. Hill	204,294	May 28, 1878	1159	331	13	990
Sewing-machine-needle clamp	H. Barclay	204,789	June 11, 1878	385	114	13	1067
Sewing-machine overseaming attachment	H. J. Watkins	202,313	Apr. 9, 1878	480	{ 140 141 }	13	671
Sewing-machine presser-foot	J. A. Lakin	205,966	July 16, 1878	569	163	14	90
Sewing-machine presser-foot	H. F. Trowbridge	202,303	Apr. 9, 1878	470	137	13	669
Sewing-machine presser-foot	T. P. West	202,771	Apr. 23, 1878	908	287	13	750
Sewing-machine, Revolving-hook	J. W. Corey	198,970	Jan. 8, 1878	261	74, 75	13	56
Sewing-machine ruffler	G. W. Burgess	200,431	Feb. 19, 1878	562	165	13	335
Sewing-machine, Running-stitch	J. Heberling	204,604	June 4, 1878	177	57	13	1037
Sewing-machine shuttle	E. Bonseay	207,004	Aug. 13, 1878	367	112	14	255
Sewing-machine shuttle	P. Diehl	200,606	Feb. 26, 1878	753	221	13	372
Sewing-machine shuttle	W. T. Elliott	205,254	June 25, 1878	894	265	13	1142
Sewing-machine shuttle	G. W. Hunter	210,330	Nov. 26, 1878	883	260	14	809
Sewing-machine shuttle	J. F. Hutton	200,305	Feb. 12, 1878	421	125	13	306
Sewing-machine shuttle	R. Leavitt	208,021	Sept. 17, 1878	483	144	14	418
Sewing-machine shuttle	N. D. Stoops	202,602	Apr. 10, 1878	803	232	13	716
Sewing-machine stopper	D. E. Dutrow	206,094	July 10, 1878	696	201	14	106
Sewing machine, Straw-braid	F. Blackburn and V. Moeslein	200,022	Feb. 5, 1878	126	42	13	253
Sewing machine, Straw-braid	C. F. Bosworth	199,500	Jan. 22, 1878	808	237	13	150
Sewing machine, Straw-braid	W. Menkhoff	207,763	Sept. 3, 1878	182	56	14	372
Sewing machine, Straw-braid	F. D. Palmer	204,599	June 4, 1878	171	55	13	1037
Sewing-machine table	M. Gritzner	204,724	June 11, 1878	313	96	13	1059
Sewing-machine table	S. Hill	204,219	May 28, 1878	1086	309	13	981
Sewing-machine take-up	J. McCloskey	201,260	Mar. 12, 1878	447	138	13	488
Sewing-machine thread-controller	D. Barcellos	203,102	Apr. 30, 1878	1343	{ 390 391 }	13	798
Sewing-machine thread-cutter	E. Flather	207,648	Sept. 3, 1878	68	20	14	357
Sewing-machine thread-cutting attachment	H. Pollock	210,466	Dec. 3, 1878	80	20	14	834
Sewing-machine thread-tension	M. A. Conklin	206,774	Aug. 6, 1878	120	38	14	221
Sewing-machine treadle attachment	C. B. Veronee	204,776	June 11, 1878	369	111	13	1066
Sewing-machine treadle movement	P. F. Jonte	207,745	Sept. 3, 1878	163	50	14	370
Sewing-machine trimmer	J. E. Wilson	202,908	Apr. 23, 1878	1146	329	13	767
Sewing-machine trimming mechanism	T. Briggs	198,790	Jan. 1, 1878	74	19	13	19
Sewing-machine tuck-marker	G. Rehfuss	209,075	Oct. 15, 1878	688	199	14	592
Sewing-machine turn-table	E. Moreau	206,035	July 16, 1878	638	185	14	98
Sewing-machine, Wax-thread	J. Keith	209,126	Oct. 22, 1878	760	{ 220 221 }	14	607
Sewing-machine, Wax-thread	J. H. Walker	200,111	Feb. 5, 1878	222	68	13	267
Sewing-machine, Wax-thread	H. J. Watkins	202,314	Apr. 9, 1878	482	141	13	671
Sewing-machine work-trimmer	H. H. Hallett	202,721	Apr. 23, 1878	946	271	13	742
Sewing-machines, Braid-guide for	E. T. Thomas	207,692	Sept. 3, 1878	108	32	14	362
Sewing-machines, Clamp for attaching scroll-saws to	J. G. Lettelier	209,764	Nov. 12, 1878	260	77	14	720
Sewing-machines, Clutch for band-wheels of	G. M. Pratt	209,712	Nov. 5, 1878	189	56	14	709
Sewing-machines, &c., Fan attachment for	J. W. Chambers	210,296	Nov. 26, 1878	846	249	14	805
Sewing-machines, Feeding device for button-hole	J. W. Furbush and J. Perley	207,173	Aug. 20, 1878	546	164	14	281
Sewing-machines, Fur-controlling guide for	G. H. Dimond and S. D. Castle	206,667	Aug. 6, 1878	9	3	14	208
Sewing-machines, Fur-guide for glove	H. Wollenberg and J. Priesner	206,848	Aug. 6, 1878	200	63, 64	14	231
Sewing-machines, Shuttle-driving mechanism for	E. Broseman, M. Russenberger, and M. Rosenstock	204,291	May 28, 1878	1155	330	13	989
Sewing-machines, Shuttle-race for	J. M. Fair and W. Hinze	209,877	Nov. 12, 1878	375	112	14	755
Sewing machines, Throat-plate for boot and shoe	J. S. Turner	199,759	Jan. 29, 1878	1094	321	13	203
Sewing-machines, Treadle apparatus for applying power to	L. Sternberger	203,791	May 14, 1878	596	166	13	907
Sewing-machines, Trimmer for wax-thread	J. I. and H. Pellerin	208,631	Oct. 1, 1878	177	51	14	512
Sewing-machines, Waxing device for	W. S. Hadaway	208,679	Oct. 8, 1878	240	68	14	528
Sewing-machines, Waxing device for	M. H. Pearson	199,991	Feb. 5, 1878	98	32	13	249
Shackles, Prisoner's	G. S. Hickox	204,669	June 11, 1878	253	79	13	1051
Shade-roller	B. Handforth	208,811	Oct. 8, 1878	384	109	14	547
Shade-roller, Spring	C. Bissmann	203,404	May 7, 1878	174	50	13	844
Shade-roller, Spring	J. C. Lake	210,337	Nov. 26, 1878	892	261	14	810
Shaft and journal	A. E. Smith	207,313	Aug. 20, 1878	690	206	14	300
Shaft and pulley coupling	H. C. Crowell	208,965	Oct. 15, 1878	564	164	14	575
Shaft-coupling	H. C. Hunter and J. Everding	203,156	Apr. 30, 1878	1405	410	13	806
Shaft-coupling	A. Lochner	209,765	Nov. 12, 1878	260	77	14	720
Shaft-coupling	C. G. Rowell	202,473	Apr. 16, 1878	657	192	13	700
Shaft-lug protector	C. E. Edmunds	205,789	July 9, 1878	367	106	14	58
Shaft-supporter for vehicles	E. L. Chamberlain	201,329	Mar. 19, 1878	539	166	13	568
Shaft, Vehicle	J. Q. Adams	209,540	Nov. 5, 1878	2	1	14	681
Shaft, Vehicle	W. S. Boyd, 3d	208,787	Oct. 8, 1878	352	101	14	543
Shaft with reverse motion, Counter	A. Guild and I. B. Clark	209,715	Feb. 26, 1878	869	255	13	389
Shafts and axles, Anti-friction bearing for rotary	J. Lange and A. Eisenbraun	198,987	Jan. 8, 1878	279	80	13	50
Shafts, Bearing for rub-roll	D. Hyde	204,046	May 21, 1878	876	251	13	950
Shafts, Device for splicing carriage	S. H. Raymond	201,892	Apr. 2, 1878	33	9	13	603
Shafts or spindles, Step-box for	J. W. Collet	202,997	Apr. 30, 1878	1244	360	13	785
Shafts, Universal joint for connecting rotary	J. L. Follett	200,046	Feb. 5, 1878	157	51	13	258
Shafting-lubricator	A. D. Hoffman	200,395	Feb. 19, 1878	527	155	13	330
Shafting, Machine for straightening	E. E. Atwood	202,978	Apr. 30, 1878	1227	355	13	782
Sharpening-surface	J. Piarre	207,892	Sept. 10, 1878	335	101	14	394
Shaving apparatus	J. Monks	206,473	July 30, 1878	1165	334	14	172

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Shaving-horse, Folding.....	S. E. Cress .....	206,005	July 16, 1878	609	176	14	95
Shawl, Shetland.....	F. Farrand .....	204,959	June 18, 1878	584	171	13	1066
Shawl-strap .....	N. T. Butler .....	206,928	Aug. 13, 1878	295	90	14	246
Shawl-strap .....	W. R. Streeter .....	208,126	Sept. 17, 1878	589	175	14	433
Shawl-strap and head-rest combined.....	E. P. Cowan .....	200,179	Feb. 12, 1878	296	88	13	287
Shawl-strap handle .....	W. P. Ferguson .....	211,004	Dec. 17, 1878	701	193	14	930
Shears:							
See Metal-shears. Sheep-shears.							
Pruning-shears.							
Shears.....	E. Van Noorden .....	199,943	Feb. 5, 1878	55	18	13	241
Shears for cutting sheet material .....	D. F. Hartford .....	203,449	May 7, 1878	228	65	13	851
Shears for marking stock .....	W. Wright .....	203,098	Apr. 30, 1878	1339	389	13	797
Shearing animals, Device for .....	W. M. G. Turquand .....	206,650	July 30, 1878	1352	389	14	195
Shearing machine, Animal .....	E. J. Watson and F. Armstrong .....	205,450	June 25, 1878	1099	325	13	1169
Shearing machine, Sheep .....	W. S. Burgess .....	206,661	Aug. 6, 1878	4	2	14	207
Shearing, punching, and stamping machine, Metal .....	H. O'Neill .....	207,619	Sept. 3, 1878	34	12	14	353
Sheave or pulley .....	H. Lond .....	207,535	Aug. 27, 1878	942	277	14	336
Shedding mechanism .....	O. Piper .....	199,223	Jan. 15, 1878	525	154	13	98
Sheep-protector .....	C. Gilbert .....	204,964	June 18, 1878	590	172	13	1097
Sheep-rack .....	N. E. Allen .....	209,207	Oct. 22, 1878	843	243	14	617
Sheep-shears, Guard for .....	F. A. Helmecke .....	208,311	Sept. 24, 1878	804	234	14	463
Sheep shears, Power .....	J. C. Wightman .....	199,243	Jan. 15, 1878	542	160	13	101
Sheep-shears, Thumb-rest for .....	J. Richardson, jr. ....	202,469	Apr. 16, 1878	654	191	13	699
Sheep-wash .....	A. and R. Scott and C. A. Skene .....	200,941	Mar. 5, 1878	118	.....	13	433
Sheet-metal box .....	J. Gilbert .....	209,556	Nov. 5, 1878	19	7	14	684
Sheet-metal can .....	M. Brenner .....	202,514	Apr. 16, 1878	693	203	13	765
Sheet-metal can .....	G. D. Brooks .....	207,007	Aug. 13, 1878	369	113	14	255
Sheet-metal can .....	J. S. Field .....	206,429	July 30, 1878	1121	321	14	166
Sheet-metal can .....	J. S. Field .....	210,512	Dec. 3, 1878	130	34	14	840
Sheet-metal can .....	A. N. Lapierre .....	209,060	Oct. 15, 1878	674	194	14	589
Sheet-metal can .....	J. W. Miller and B. Coll .....	207,058	Aug. 13, 1878	416	128	14	261
Sheet-metal can .....	I. Porter .....	205,677	July 2, 1878	228	63	14	37
Sheet-metal can .....	R. Porter .....	205,676	July 2, 1878	227	68	14	37
Sheet-metal can .....	J. Solter .....	203,506	May 7, 1878	281	80	13	859
Sheet-metal cans, Manufacture of .....	E. T. Covell .....	204,656	June 11, 1878	240	75	13	1050
Sheet-metal cutting machine .....	H. B. and M. C. Asher .....	204,415	June 4, 1878	2	1	13	1013
Sheet-metal elbow .....	J. Stern and W. Meyn .....	210,367	Nov. 26, 1878	928	270	14	815
Sheet-metal fender .....	H. Adler .....	205,820	July 9, 1878	403	115	14	64
Sheet-metal flanging machine .....	A. W. Vanderston .....	201,305	Mar. 12, 1878	496	133	13	495
Sheet-metal, Machine for drying and scouring .....	A. P. Hine .....	198,980	Jan. 8, 1878	270	78	13	57
Sheet-metal, Machine for straightening .....	E. A. Harvey .....	202,027	Apr. 2, 1878	166	48	13	623
Sheet-metal package .....	J. F. Ross .....	209,987	Nov. 19, 1878	500	152	14	755
Sheet-metal pan .....	J. Edgar .....	203,328	May 7, 1878	98	28	13	853
Sheet-metal pan machine .....	T. M. Powers .....	201,827	Mar. 26, 1878	1052	321	13	586
Sheet-metal pipe .....	G. W. Ketcham .....	207,606	Sept. 3, 1878	22	8	14	352
Sheet-metal plates, Marking .....	H. Wood .....	198,135	Jan. 8, 1878	426	125	13	82
Sheet-metal vessels, Handle for .....	F. Grosjean .....	204,319	May 28, 1878	1185	337	13	993
Sheet-metal vessels, Machine for shaping and ornamenting.....	T. W. Crees .....	210,996	Dec. 17, 1878	691	190	14	929
Sheet-metal vessels, Manufacture of .....	J. Chaumont .....	210,751	Dec. 10, 1878	393	109	14	884
Sheet-metal vessels or utensils, Handle for .....	F. Grosjean .....	202,540	Apr. 16, 1878	742	214	13	709
Sheet-metal vessels or utensils, Handle for .....	F. Grosjean .....	202,541	Apr. 16, 1878	743	214	13	710
Shelf step or bracket .....	J. C. Thomas .....	201,721	Mar. 26, 1878	946	290	13	570
Shelf-support .....	J. L. Gunther .....	207,804	Sept. 10, 1878	234	74	14	382
Shell, Explosive .....	G. W. Turner .....	206,153	July 16, 1878	770	221	14	114
Shell, Percussion .....	J. M. Urquhart .....	202,203	Apr. 9, 1878	368	108	13	655
Sheller:							
See Corn-sheller.							
Shelving, Store .....	J. C. Wright .....	210,178	Nov. 19, 1878	704	210	14	783
Shingle .....	H. S. Gordan .....	204,558	June 4, 1878	126	43	13	1030
Shingle-cutting machine .....	W. Goldie .....	209,472	Oct. 29, 1878	1116	326	14	660
Shingle-cutting machine .....	A. I. Hogan .....	200,912	Mar. 5, 1878	93	32	13	429
Shingle made fire-proof, Wooden .....	G. B. Smith .....	199,001	Jan. 8, 1878	293	.....	13	61
Shingle, Metallic .....	H. W. Shepard .....	207,989	Sept. 10, 1878	435	131	14	407
Shingle-packing machine .....	W. A. Bennett .....	199,895	Feb. 5, 1878	4	2	13	233
Shingle-press .....	R. A. Stahn .....	203,955	May 21, 1878	783	224	13	939
Shingle sawing and jointing machine .....	J. A. Mumford .....	204,499	June 4, 1878	74	26	13	1023
Shingle-sawing machine .....	M. F. Connett .....	206,775	Aug. 6, 1878	121	38	14	222
Shingle-sawing machine .....	D. Lane .....	200,546	Feb. 19, 1878	674	198	13	352
Shingle-sawing machine .....	W. J. Sherburne .....	199,939	Feb. 5, 1878	51	16, 17	13	241
Shingle-shaving machine .....	J. W. Davenport .....	201,503	Mar. 19, 1878	712	217	13	533
Shingling-bracket .....	T. M. McClelland and J. A. Grant .....	201,691	Mar. 26, 1878	915	279	13	565
Ship-building .....	J. B. Hall .....	209,167	Oct. 22, 1878	802	233	14	612
Ships' bottoms, &c., Apparatus for cleansing .....	J. Jones .....	209,343	Oct. 29, 1878	986	287	14	640
Ships, Construction of .....	J. Rees .....	203,940	May 21, 1878	761	219	13	926
Ships, Elastic armor for .....	W. M. Stehley .....	207,218	Aug. 26, 1878	594	179	14	288
Ships, Loading and unloading .....	H. P. Tothammer .....	210,647	Dec. 10, 1878	292	80	14	870
Ship's log .....	J. E. Massey .....	206,682	Aug. 6, 1878	28	8	14	210
Ships logs, Rotator for .....	J. and G. H. Bliss .....	208,061	Sept. 17, 1878	524	157	14	424
Ships, Shoal-indicator for .....	E. D. Miller .....	202,184	Apr. 9, 1878	351	103	13	652
Shipping-case .....	J. H. Byrne .....	204,194	May 28, 1878	1063	302	13	978
Shipping-package .....	M. C. Richards .....	204,611	June 4, 1878	186	59	13	1039
Shirt .....	W. Allen .....	206,519	July 30, 1878	1215	{ 349 350 }	14	178
Shirt .....	E. H. Inglis .....	207,872	Sept. 10, 1878	313	95	14	392
Shirt .....	A. D. Marr .....	201,433	Mar. 19, 1878	645	197	13	523
Shirt .....	G. A. McFadden .....	207,053	Aug. 13, 1878	410	127	14	261
Shirt .....	P. B. Pickens .....	204,081	May 21, 1878	915	261	13	955
Shirt bosom and collar combined .....	D. McFarland .....	208,191	Sept. 17, 1878	660	194	14	442
Shirt-neck shaper .....	A. Borchardt .....	206,856	Aug. 13, 1878	218	70	14	237
Shirts, Manufacture of .....	W. D. Lawton .....	202,558	Apr. 16, 1878	760	219	13	712
Shock-binder .....	T. J. Fulmer and F. Wiegman .....	202,014	Apr. 2, 1878	151	44	13	621
Shock-binder .....	B. D. Morrell .....	201,275	Mar. 12, 1878	462	142	13	491
Shoe .....	R. Anglemire .....	206,292	July 23, 1878	944	267	14	141
Shoe .....	H. Bond .....	200,818	Mar. 5, 1878	5	2	13	415

## Alphabetical list of inventions—Continued.

Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Shoe	J. F. Emerson	208,897	Oct. 15, 1878	489	141	14	565
Shoe	B. M. Gibson	203,439	May 7, 1878	216	61	13	850
Shoe	L. Graf	205,542	July 2, 1878	83	23	14	19
Shoe	T. J. Greenwood	203,030	Apr. 30, 1878	1278	370	13	789
Shoe	C. Heron	209,682	Nov. 5, 1878	159	47	14	702
Shoe	F. M. Hoyt	210,695	Dec. 10, 1878	339	93	14	876
Shoe	W. H. Land	199,983	Feb. 5, 1878	92	30	13	247
Shoe	J. B. Stevens	205,435	June 25, 1878	1084	321	13	1167
Shoe	W. G. Vail	203,677	May 14, 1878	475	135	13	892
Shoe and garment fastening.	L. Magniez	210,700	Dec. 10, 1878	343	94	14	877
Shoe, Balmoral	T. J. Greenwood	200,282	Feb. 12, 1878	398	118	13	302
Shoe box and drawer	S. M. Closser	202,993	Apr. 30, 1878	1240	358	13	784
Shoe-exhibitor	T. E. Lewis	200,738	Feb. 26, 1878	891	262	13	393
Shoe-fastening	E. Rees	201,124	Mar. 12, 1878	310	95	13	468
Shoe-fastening	S. T. Sanford	201,451	Mar. 19, 1878	613	202	13	525
Shoe-horn	J. Klaucke	206,249	July 23, 1878	892	254	14	134
Shoe-lace fastening	L. Aya	203,696	May 14, 1878	497	141	13	895
Shoe-laces, Clasp for exhibiting	H. H. Koch and D. Lynahan	208,018	Sept. 17, 1878	479	144	14	418
Shoe, Low	T. J. Greenwood	199,639	Jan. 29, 1878	984	286	13	185
Shoe, Marsh	R. K. Jordan	201,882	Apr. 2, 1878	24	6	13	602
Shoe-nail	E. L. Wires	206,515	July 30, 1878	1212	348	14	178
Shoe or gaiter	F. Packard	205,129	June 18, 1878	747	222	13	1118
Shoe-shank stiffener	J. M. Watson	209,530	Oct. 29, 1878	1181	342	14	609
Shoe-soles, Implements for napping the fibers of	F. Winslow	207,636	Sept. 3, 1878	55	16	14	356
Shoe-tip	J. W. Hyatt	203,834	May 21, 1878	651	185	13	922
Shoe-tip	E. F. Patridge	200,566	Feb. 19, 1878	692	204	13	355
Shoe-tree	R. Turneure	201,210	Mar. 12, 1878	390	120	13	481
Shoe-upper-fitting machine	J. Walden and G. Platts	209,732	Nov. 5, 1878	213	64	14	709
Shoe, Wood-sole	W. Gampert	203,608	May 14, 1878	404	115	13	884
Shoes, &c., Fastening device for	J. N. Clouse and B. Zipfel	210,010	Nov. 19, 1878	530	159	14	750
Shoes, Rack for holding and exhibiting	J. Priest	204,249	May 28, 1878	1115	318	13	984
Shoemaker's jack	A. S. Rogers and W. W. Fuller	203,376	May 7, 1878	148	42	13	840
Shoemaker's lap-iron	J. G. Burke	205,834	July 9, 1878	417	118	14	65
Shoemaker's tools for finishing soles, Heater for	G. A. Osgood	201,121	Mar. 12, 1878	307	94	13	468
Shot, Canister	A. M. Sawyer	200,876	Mar. 5, 1878	63	22	13	425
Shot, Canister	A. M. Sawyer	202,055	Apr. 2, 1878	193	56	13	626
Shot canisters, Measuring device for	H. C. Wey	205,934	July 9, 1878	522	148	14	79
Shot, Tin-plated	L. Crooke	204,298	May 28, 1878	1163	319	13	990
Shoulder-brace	A. Adamson	206,094	Aug. 13, 1878	385	109	14	254
Shoulder-brace and suspenders, Combined	F. M. Beckford	209,321	Oct. 29, 1878	963	281	14	637
Shoulder-brace and suspenders, Combined	C. H. Cushman	201,597	Mar. 26, 1878	829	252	13	552
Shoulder-brace and suspenders combined	A. P. Fuller	200,651	Feb. 26, 1878	800	215	13	379
Shoulder-brace and suspenders combined	N. Van Allen	203,301	May 7, 1878	72	21	14	830
Shoulder-pad	G. J. Scheu	207,211	Aug. 20, 1878	587	176	14	287
Shovel							
See Dust-shovel.							
Fire-shovel.							
Snow-shovel.							
Shovel	T. B. De Forest	202,524	Apr. 16, 1878	705	205	13	706
Shovel	J. Johnson	204,897	June 18, 1878	522	153	13	1088
Shovel	I. Showalter	201,711	Mar. 26, 1878	934	286	13	568
Shovel-handle	J. F. Milligan	203,359	May 7, 1878	127	37	13	837
Shovels and spades, Manufacture of	J. Paradis	206,747	Aug. 6, 1878	91	29	14	218
Shovels, Manufacture of	H. M. Myers	204,163	May 28, 1878	1024	291	13	973
Shovels, spades, and scoops, Handle-sockets for	H. M. Myers	208,258	Sept. 24, 1878	748	219	14	456
Show-box	T. Haviland	210,689	Dec. 10, 1878	334	91	14	876
Show-boxes, Removable cover for	P. H. Mayo and T. Atkinson	210,345	Nov. 26, 1878	902	264	14	812
Show-boxes, Removable cover for	P. H. Mayo and T. Atkinson	210,429	Dec. 3, 1878	41	9	14	829
Show-bracket for drawers and boxes	C. M. Webster	201,073	Mar. 5, 1878	251	79	13	453
Show-case	W. H. Dealy	201,756	Mar. 26, 1878	980	300	13	575
Show-case	F. A. Howell	198,982	Jan. 8, 1878	272	78	13	58
Show-case, Barrel-top	W. H. Grubb	203,613	May 14, 1878	408	116	13	884
Show-stand	E. Leger	203,629	May 14, 1878	423	121	13	886
Show-stand for Christmas-trees, &c	J. C. Eckardt	199,044	Jan. 8, 1878	331	97	13	67
Shower-bath	C. R. Furey	208,384	Sept. 24, 1878	876	255	14	472
Shower-bath	N. P. Nelson	205,757	July 9, 1878	331	96	14	54
Shower-bath, Portable	D. Deshon	208,720	Oct. 8, 1878	282	80	14	534
Shower-bath, Portable	C. R. Furey	202,015	Apr. 2, 1878	152	44	13	621
Shutter	A. Bijur	199,403	Jan. 22, 1878	716	211	13	135
Shutter	A. Bijur	207,641	Sept. 3, 1878	62	18	14	357
Shutter	W. Cruise and J. D. Isaacs	210,015	Nov. 19, 1878	535	161	14	759
Shutter	B. C. Davis	206,088	July 16, 1878	690	199	14	105
Shutter-bower	T. Thorn	208,937	Oct. 15, 1878	531	156	14	571
Shutter bower and fastener	T. B. Rogers, jr.	203,945	May 21, 1878	765	220	13	937
Shutter-fastening	J. H. Clark	199,262	Jan. 15, 1878	562	165	13	104
Shutter-fastening	P. F. Fernandez	206,713	Aug. 6, 1878	57	18	14	214
Shutter-fastening	P. N. Horsley	201,417	Mar. 19, 1878	629	192	13	521
Shutter-fastening	J. C. Knoeppel	200,921	Mar. 5, 1878	101	34	13	430
Shutter, Fire-proof	S. L. Pollock	205,297	June 25, 1878	940	279	13	1148
Shutter, Window	G. Hayes	198,979	Jan. 8, 1878	269	77	13	57
Shutter-worker	P. C. Close	202,151	Apr. 9, 1878	311	92	13	647
Shutter-worker	T. Corrigan	202,413	Apr. 16, 1878	596	176	13	691
Shutter-worker	W. Jones	209,055	Oct. 15, 1878	666	192	14	589
Shuttlecock	W. P. Shannon	206,689	Aug. 6, 1878	36	10	14	211
Sickle-grinder	A. D. Hoffman	201,610	Mar. 26, 1878	842	255	13	554
Side spring	E. P. Carter	206,086	July 16, 1878	688	199	14	105
Sideboard and dining-table combined	J. R. Shirley	201,292	Mar. 12, 1878	481	147	13	493
Sidewalk-joint	H. B. Dyer	201,171	Mar. 12, 1878	353	109	13	475
Sieve	L. E. Ambrose	210,481	Dec. 3, 1878	93	23	14	836
Sieve	E. Oliver	208,261	Sept. 24, 1878	753	220	14	456
Sieve	M. A. and G. A. Richardson	205,210	June 25, 1878	848	252	13	1137
Sieve	H. H. Waters	207,633	Sept. 3, 1878	48	15	14	355
Sieve, Adjustable	J. Dildine	210,243	Nov. 26, 1878	790	234	14	797
Sieve and strainer, Combined	T. M. Hill	201,609	Mar. 26, 1878	842	255	13	554



*Alphabetical list of patentees for the year 1878—Continued.*

Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Sieve, Flour.	J. H. Lynch	210,341	Nov. 26, 1878	899	263	14	811
Sieve, Paper-hoop	M. Kennedy	210,259	Nov. 26, 1878	805	239	14	800
Sifter	C. O. Peck	209,710	Nov. 5, 1878	187	55	14	706
Sifter, Ash.	E. Baldwin, jr.	234,474	June 4, 1878	56	18	13	1020
Sifter, Ash.	J. W. Baldwin	203,697	May 14, 1878	497	141	13	895
Sifter, Ash.	W. E. Brush	208,369	Sept. 24, 1878	861	251	14	470
Sifter, Ash.	F. S. Clarkson	207,948	Sept. 10, 1878	393	118	14	402
Sifter, Ash.	J. E. Cumings	202,157	Apr. 9, 1878	326	95	13	649
Sifter, Ash.	A. B. Kingsbury	199,449	Jan. 22, 1878	757	222	13	142
Sifter, Ash.	B. R. Tenney	206,502	July 30, 1878	1200	344	14	176
Sifter, Clay	N. Goddard	202,717	Apr. 23, 1878	943	270	13	742
Sifter, Coal and ash	T. F. King	207,529	Aug. 27, 1878	936	275	14	335
Sifter, Flour and meal	F. G. Ford	208,585	Oct. 1, 1878	133	38	14	507
Sifter, scoop, and strainer, Flour.	W. F. Kistler	205,560	July 2, 1878	103	30	14	22
Sign.	C. Bellenot	210,983	Dec. 17, 1878	678	187	14	927
Sign.	J. L. Blackmer	208,060	Sept. 17, 1878	523	156	14	424
Sign.	W. Gulden	208,974	Oct. 15, 1878	573	167	14	576
Sign.	H. Petrie	209,583	Nov. 5, 1878	47	13	14	687
Sign.	E. Powell	207,549	Aug. 27, 1878	958	281	14	338
Sign, Rotary	G. H. Rice	210,052	Nov. 19, 1878	571	171	14	764
Sign, Street	J. N. Greene	210,250	Nov. 26, 1878	797	236	14	798
Sign, Umbrella.	W. B. Wortman	207,332	Aug. 20, 1878	709	212	14	263
Signs, Letters and numbers for.	J. A. Bruce	209,796	Nov. 12, 1878	291	87	14	724
Signal:							
See Fog-signal.	Switch-signal.						
Magneto-signal.	Telephone-call signal.						
Railway-signal.	Time-signal.						
Railway-switch signal.							
Signaling apparatus.	W. Grant	204,721	June 11, 1878	308	95	13	1059
Signaling apparatus.	W. Roberts, jr.	206,749	Aug. 6, 1878	92	30	14	218
Silk from cocoons, Electrical regulator for reeling.	E. W. Serrell, jr.	202,125	Apr. 9, 1878	286	84	13	644
Silk, Machine for beating	J. Weidmann	208,502	Oct. 1, 1878	47	15, 16	14	496
Sink, Kitchen	M. W. Scannell	204,255	May 28, 1878	1121	320	13	985
Sink, Set-back	C. Copman	207,393	Aug. 27, 1878	787	234	14	318
Sink-trap	H. W. Clapp	199,145	Jan. 15, 1878	451	133	13	86
Sink-trap	J. H. Codding	199,413	Jan. 22, 1878	726	213	13	187
Sinks, Grease-arrester for.	W. T. Aikins	200,012	Feb. 5, 1878	117	38	13	252
Sinks, Soap-dish for iron	W. C. Higgins	208,094	Sept. 17, 1878	552	165	14	428
Sirup evaporator and skimmer	R. M. and J. M. Brooks	206,532	July 30, 1878	1226	353	14	180
Sirup, Flavored.	H. W. Walker and T. L. Patterson.	200,780	Feb. 26, 1878	929		13	399
Sirup-gage	J. Bryan	201,593	Mar. 26, 1878	824	251	13	532
Siphon	E. Cardarelli	201,746	Mar. 26, 1878	971	297	13	574
Siphon	W. G. Rhoads	210,965	Dec. 17, 1878	655	181	14	925
Siphon	E. Uhrich	201,134	Mar. 12, 1878	320	98	13	470
Siphon	G. H. Winkler	205,163	June 18, 1878	786	233	13	1123
Skate.	E. H. Barney	200,424	Feb. 19, 1878	555	164	13	354
Skate.	E. H. Barney	206,524	July 30, 1878	1220	351	14	179
Skate.	L. Cook	206,165	July 23, 1878	799	229	14	122
Skate.	P. C. Franke	206,170	July 23, 1878	805	230	14	123
Skate.	S. Horsford	199,906	Feb. 5, 1878	15	5	13	235
Skate.	G. Klotz	199,720	Jan. 29, 1878	1060	310	13	197
Skate.	E. F. Weston	210,730	Dec. 10, 1878	376	103	14	881
Skate, Roller	S. A. Allen	171,009	Jan. 8, 1878	300	88	13	62
Skate, Roller	J. H. Bowen	208,508	Oct. 1, 1878	51	17	14	496
Skate, Roller	J. Forsyth	200,186	Feb. 12, 1878	305	91	13	288
Skate, Roller	W. P. Gregg	208,234	Sept. 24, 1878	720	212	14	453
Skate, Roller	W. P. Gregg	208,235	Sept. 24, 1878	721	212	14	453
Skate, Roller	E. Robinson	199,604	Jan. 29, 1878	1009	294	13	189
Skate-sharpener	H. U. Kistner and E. M. Hummel	205,561	July 2, 1878	104	30	14	22
Skeps or other baskets, Machine for making	W. Illingworth and C. Zeidler	204,825	June 11, 1878	419	124 } 125 }	13	1072
Skid.	C. A. and J. A. Koehler	202,177	Apr. 9, 1878	344	101	13	632
Skin, Artificial sheep.	C. A. Evans	202,427	Apr. 16, 1878	614		13	694
Skins, Device for measuring and weighing	D. T. Winter	208,942	Oct. 15, 1878	535	157 } 158 }	14	572
Skins, Preparing gray-squirrel	H. Breisacher	208,510	Oct. 1, 1878	54	17	14	496
Skirt	S. Fullner	203,607	May 14, 1878	403	114	13	883
Skirt-exhibitor	G. W. Everett	202,713	Apr. 23, 1878	940	269	13	741
Skirt-supporter	J. Jenkins	201,531	Mar. 19, 1878	744	226	13	537
Skiving-machine	F. M. Carter	205,726	July 9, 1878	298	88	14	50
Skiving-machine	C. Dancel and E. C. Smith	208,574	Oct. 1, 1878	122	35	14	505
Skylight	A. and G. Bickelhaupt	206,853	Aug. 13, 1878	216	69	14	257
Skylight	M. T. Durkin	202,160	Apr. 9, 1878	329	96	13	649
Skylight, Ventilating.	S. J. Pardessus	200,332	Feb. 12, 1878	453	134	13	316
Slasher	M. L. Hitchcock	201,014	Mar. 5, 1878	193	61	13	445
Slate	M. Frankenstein	203,026	Apr. 30, 1878	1275	369	13	788
Slate	C. F. Rapp	210,211	Nov. 26, 1878	756	224	14	793
Slate	C. C. Shepherd	205,582	July 2, 1878	125	37	14	26
Slate, Apparatus for grinding and shaping	J. W. Hyatt	204,151	May 28, 1878	1010	27	13	971
Slate composition	H. Pettengell	199,859	Jan. 29, 1878	1191		13	217
Slate-frame	J. W. Hyatt	199,907	Feb. 5, 1878	16	5	13	235
Slate-frame attachment.	C. Goldthwait	200,137	Feb. 12, 1878	255	77	13	281
Slate-frame attachment.	F. G. Johnson	204,740	June 11, 1878	329	100	13	1061
Slate-grinding machine.	J. W. Hyatt	209,265	Oct. 22, 1878	893	261	14	625
Slates, Covering the sides and roofs of buildings with.	E. N. Leslie	199,075	Jan. 8, 1878	361	107	13	73
Sled	R. Armstrong	202,976	Apr. 30, 1878	1226	354	13	782
Sled	W. Chegwain	207,344	Aug. 27, 1878	741	221	14	312
Sled	T. Grather	201,519	Mar. 19, 1878	730	223	13	535
Sled	B. M. Wilkerson	205,162	June 18, 1878	786	233	13	1123
Sled, Boy's	J. Y. Chapman	199,897	Feb. 5, 1878	7	2	13	233
Sled-brake	G. W. Hooker	209,398	Oct. 29, 1878	1041	302	14	649
Sled-knee	E. G. Whiting	205,936	July 9, 1878	524	149	14	79



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				Spec.	Dis.	Vol.	Page.
Sled, Logging	J. Conniff	208,572	Oct. 1, 1878	121	35	14	505
Sled-propeller	J. B. Erwin	199,361	Jan. 22, 1878	676	198	13	129
Sled-propeller	J. Mahedy	205,196	June 25, 1878	836	248	13	1135
Sled-propeller	J. A. Zoebel	204,937	June 18, 1878	562	164	13	1093
Sled-runner attachment for vehicles	F. Kuempel	198,748	Jan. 1, 1878	19	5	13	11
Sled, Stone and log	W. Gregg	209,639	Oct. 15, 1878	643	186	14	586
Sleeve-elevator	H. Moses	209,413	Oct. 29, 1878	1054	307	14	651
Sleeve-protector	J. S. Vanhorn	203,676	May 14, 1878	474	134	13	892
Sleeve-supporter	J. P. Lindsay	202,735	Apr. 23, 1878	957	275	13	744
Sleigh	J. J. Cobb	204,884	June 18, 1878	507	148	13	1086
Sleigh	J. W. Post	201,556	Mar. 19, 1878	769	234	13	540
Sleigh-bells, Manufacture of	G. W. Tucker	203,675	May 14, 1878	474	134	13	892
Sleigh-brake, Automatic.	H. Hunt	210,039	Nov. 19, 1878	558	167	14	763
Sleigh-knee	G. A. and H. J. Gilbert	209,251	Oct. 22, 1878	881	256	14	623
Sleigh-knee	F. Larson and F. D. Livermore	203,470	May 7, 1878	248	71	13	854
Sleigh-propeller	R. Schlüter	209,083	Oct. 15, 1878	696	201	14	592
Sleigh-standard	S. R. Bailey	201,148	Mar. 12, 1878	334	102	13	472
Sleighs, Adjustable draft-bar for	W. Burke	203,703	May 14, 1878	502	142	13	896
Slicing-machine	J. G. Baker	210,678	Nov. 19, 1878	602	179	14	768
Slimes, Machine for drying	J. W. Dillon	202,709	Apr. 23, 1878	936	267	13	741
Slipper	W. H. Burch and J. E. Curtiss	210,594	Dec. 10, 1878	234	64	14	863
Sluice and flood gate	B. B. Downs	207,555	Sept. 10, 1878	397	120	14	402
Snap-hook	C. W. Blakeslee	206,657	Aug. 6, 1878	1	1	14	207
Snap-hook	C. P. Bonfoey	203,238	May 7, 1878	3	1	13	821
Snap-hook	L. J. Bristol	203,584	May 14, 1878	384	109	13	881
Snap-hook	R. W. Jones	203,461	May 7, 1878	238	68	13	853
Snap-hook	W. H. Main	208,250	Sept. 24, 1878	738	216	14	455
Snap-hook	J. C. Schneider	207,309	Aug. 20, 1878	686	204	14	300
Snatch-block	T. J. Bray	205,237	June 25, 1878	880	260	13	1141
Snatch-block	M. H. Tarbox	199,215	Jan. 15, 1878	536	158	13	100
Snout-ring	A. L. Hill	207,960	Sept. 10, 1878	411	124	14	404
Snow and ice in the gutters of buildings, Device for melting.	F. O. Rogers	206,357	July 23, 1878	1024	293	14	150
Snow-melting machine	S. M. Lederer	207,970	Sept. 10, 1878	415	125	14	405
Snow-shovel	A. S. Robinson	203,375	May 7, 1878	147	42	13	840
Snow-shovel	H. W. Searle	200,152	Feb. 12, 1878	269	80	13	283
Snuff-package	B. F. Weyman	199,128	Jan. 8, 1878	420	123	13	81
Smelting furnace, Lead	J. B. McCurdy	198,949	Jan. 8, 1878	238	68	13	52
Smoke and cinder conductor for railway-trains	J. J. Frey	209,672	Nov. 5, 1878	151	44	14	701
Smoke and spark conveyer	R. F. Hill	209,620	Oct. 27, 1878	889	259	14	624
Smoke-consuming furnace	A. Gross	202,646	Apr. 23, 1878	871	250	13	734
Smoke-consuming furnace for boilers	D. S. Olds	206,123	July 16, 1878	736	211	14	110
Smoke-preventing furnace	W. M. Fisher	205,849	July 9, 1878	430	122	14	67
Smoke-stack	E. Clemons	209,231	Oct. 22, 1878	864	251	14	621
Smoke-stack and spark-arrester, Locomotive	W. M. K. Thornton	209,992	Nov. 19, 1878	505	153	14	756
Smoke-stack, Locomotive	W. F. Beecher	204,522	June 4, 1878	95	32	13	1026
Smoke-stack, Locomotive	I. H. Congdon	203,592	May 14, 1878	392	111	13	882
Smoke-stack, Locomotive	G. W. Turner	209,994	Nov. 19, 1878	509	154	14	756
Smoke-stacks, Cone, &c., for locomotive	G. W. Prescott	210,468	Dec. 3, 1878	81	20	14	834
Smoking-pipe	W. H. Caddy	208,886	Oct. 15, 1878	475	136	14	563
Smoother-iron	N. J. Powell	209,133	Oct. 22, 1878	769	223	14	607
Smut-machine	W. S. Hills	208,241	Sept. 24, 1878	727	213	14	454
Soap	A. H. West	204,116	May 21, 1878	950	251	13	959
Soap-bubble pipe	S. B. Bliss	208,063	Sept. 17, 1878	526	157	14	424
Soap-crutching machine	S. Strunz	202,886	Apr. 23, 1878	1125	323	13	765
Soap-frame	H. Rathmann	205,136	June 18, 1878	756	224 } 225 }	13	1120
Soap-holder	W. H. Dewees	205,365	June 25, 1878	1016	300	13	1158
Soap, Medicated	E. A. Adams	210,889	Dec. 17, 1878	561	151	14	913
Soap, Medicated	E. L. Moodie	199,087	Jan. 8, 1878	373	103	13	75
Soap, Medicated	T. Taylor	203,090	Apr. 30, 1878	1333	377	13	797
Soap, Toilet	J. L. Pollock	204,842	June 11, 1878	443	133	13	1074
Sod-cutter	H. D. Eddy and J. M. Kasson	209,804	Nov. 12, 1878	298	89	14	725
Sod-cutter and cotton-chopper	J. Moore	200,327	Feb. 12, 1878	449	133	13	810
Soda, Manufacture of bicarbonate of	G. T. Lewis and W. J. Menzies	202,356	Apr. 16, 1878	545	159	13	684
Soldering apparatus	F. S. Robinson	200,875	Mar. 5, 1878	62	21	13	424
Soldering device	F. B. Davis	200,437	Feb. 19, 1878	567	167	13	336
Soldering-iron handle	H. K. Hines	206,328	July 23, 1878	990	281	14	146
Soldering-irons, Furnace for heating	J. Burgess	205,049	June 18, 1878	672	197	13	1108
Soldering square cans, Machine for	R. Gornall	204,315	May 28, 1878	1180	336	13	993
Soldering-tool	P. P. Haines	201,522	Mar. 19, 1878	732	223	13	536
Soldering-tweezers for jewelers	C. F. George	201,404	Mar. 19, 1878	620	189	13	519
Sorghum and maize, Clarifying the juices of	F. L. Stewart	203,507	May 7, 1878	281	85	13	859
Sounding apparatus, Deep-sea	W. Thomson	210,067	Nov. 19, 1878	586	175 } 176 }	14	766
Sower, Seed	W. A. Horrall and J. J. Verckler	205,090	June 18, 1878	713	211	13	1113
Spade, Post-hole	Z. L. Hoover	201,787	Mar. 26, 1878	1015	310	13	580
Spading and seeding machine, Combined	J. S. Williams	210,387	Nov. 26, 1878	953	276	14	818
Spanner or wrench	W. R. Leeson	208,105	Sept. 17, 1878	564	168	14	430
Spark-arrester	J. Allonas	205,716	July 9, 1878	287	85	14	49
Spark-arrester	J. T. Connelly and H. C. Huston	203,121	Apr. 30, 1878	1361	396	13	800
Spark-arrester	A. Delaney	209,668	Nov. 5, 1878	145	42	14	700
Spark-arrester	A. O. Denio	199,521	Jan. 22, 1878	836	244	13	154
Spark-arrester	A. Elliott	202,424	Apr. 16, 1878	610	179	13	693
Spark-arrester	A. Elliott	206,549	July 30, 1878	1242	357	14	182
Spark-arrester	J. Kirkland	201,685	Mar. 26, 1878	911	278	13	565
Spark-arrester	D. R. Proctor	206,132	July 16, 1878	745	214	14	111
Spark-arrester	W. T. Urie	198,919	Jan. 1, 1878	203	57	13	39
Spark-arrester	D. Wiser	210,828	Dec. 10, 1878	476	134	14	895
Spark-arrester	C. E. Wyman	202,914	Apr. 23, 1878	1151	339	13	768
Spark-arrester and extinguisher	J. W. Ledyard	201,803	Mar. 26, 1878	1029	314	13	582
Spark-arrester, Locomotive	A. Davis	209,665	Nov. 5, 1878	142	42	14	700
Spark-arrester, Locomotive	E. and C. S. Osborn	205,806	July 9, 1878	388	111	14	61
Spark-extinguisher	J. H. Bartlett	210,656	Dec. 10, 1878	301	82	14	871

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Spark-extinguisher.....	B. V. Crumrine.....	198,796	Jan. 1, 1878	79	21	13	20
Spark-extinguisher.....	J. Johnson.....	204,759	June 11, 1878	328	99	13	1061
Spark-extinguisher.....	C. Reimann.....	206,828	Aug. 6, 1878	173	55	14	228
Speaking and signaling apparatus, Combined.....	C. Heisler.....	209,760	Nov. 12, 1878	253	75	14	719
Speaking-machine.....	T. A. Edison.....	201,760	Mar. 26, 1878	986	301	13	576
Speaking-tube.....	T. J. and G. O. Woolcocks.....	200,420	Feb. 19, 1878	552	163	13	334
Spectacle and eyeglass frame.....	G. D. Edmondson.....	206,306	July 23, 1878	962	273	14	143
Spectacle-frame.....	J. F. Traub.....	204,265	May 28, 1878	1129	323	13	966
Spectacles.....	B. X. Blair.....	267,844	Sept. 10, 1878	277	85	14	387
Spectacles, Lenses for.....	J. R. Rowell.....	210,712	Dec. 10, 1878	356	98	14	878
Speculum.....	A. Bradford.....	206,162	July 23, 1878	797	228	14	121
Speculum, Vaginal.....	J. C. Hall.....	202,813	Apr. 23, 1878	1046	300	13	755
Speed, Changing.....	S. G. Dorr.....	208,227	Sept. 24, 1878	710	209	14	432
Speed-indicator.....	W. R. Schürmann.....	206,621	July 30, 1878	1320	380	14	191
Speed-indicator.....	W. S. Bates.....	199,682	Jan. 29, 1878	1027	299	13	192
Speed-indicator.....	D. Hussey.....	201,677	Mar. 26, 1878	902	276	13	564
Speed-recorder.....	H. Dorpmüller.....	205,844	July 9, 1878	425	121	14	66
Speed-recorders, Mechanism for imparting motion to.....	W. W. Wythe.....	203,865	May 21, 1878	683	194	13	926
Spherical bodies, Machine for cutting.....	R. W. Wheeler.....	203,515	May 7, 1878	290	83	13	861
Sphygmograph.....	E. A. Pond.....	205,412	June 25, 1878	1061	315	13	1164
Sphygmometer.....	A. T. Keyt.....	203,548	May 14, 1878	347	99	13	876
Spice-box.....	T. W. Burger.....	199,896	Feb. 5, 1878	6	2	13	233
Spike.....	E. Lawrence.....	202,952	Apr. 30, 1878	1202	347	13	779
Spike-extractor.....	J. F. Scribner.....	206,902	Aug. 13, 1878	272	82	14	243
Spike-extractor.....	W. Upton.....	202,009	Apr. 10, 1878	811	254	13	717
Spike, Railway.....	D. Servis.....	205,914	July 9, 1878	501	142	14	70
Spindle: See Mill-spindle. Spinning-machine spindle.							
Spindle for cleaning and smoothing silk and other threads.....	E. J. Martin.....	202,448	Apr. 16, 1878	635	185	13	697
Spindles, Bobbin-socket for.....	W. F. Hastings.....	201,414	Mar. 19, 1878	627	191	13	520
Spine-diseases, Machine for treating.....	M. Case.....	198,871	Jan. 1, 1878	151	43	13	32
Spinning-fliers, Lock for.....	J. B. Thorwarth and M. Harrison.....	209,727	Nov. 5, 1878	206	61	14	708
Spinning-frame.....	W. D. Isett.....	204,436	June 4, 1878	21	7, 8	13	1015
Spinning frame, Ring.....	E. T. Lanphear.....	205,655	July 2, 1878	201	60	14	35
Spinning frame, Ring.....	J. W. Wattles.....	206,755	Aug. 6, 1878	97	31	14	219
Spinning frames, Thread-guard support for ring.....	J. Doyle.....	202,420	Apr. 16, 1878	607	178	13	692
Spinning-machine.....	J. B. Mackie.....	203,632	May 14, 1878	425	122	13	886
Spinning-machine.....	J. C. Stanley.....	201,130	Mar. 12, 1878	315	96, 97	13	469
Spinning-machine for spotting and covering yarn.....	W. McVillia.....	208,622	Oct. 1, 1878	166	48	14	511
Spinning-machine ring.....	N. I. Allen.....	203,573	May 14, 1878	375	106	13	780
Spinning-machine spindle.....	F. J. Rabbeth.....	210,358	Nov. 26, 1878	918	.....	14	814
Spinning-machine spindles, Reservoir bolster-bearing for.....	F. J. Rabbeth.....	204,085	May 21, 1878	918	263	13	956
Spinning-machinery, Spindle and flier for.....	H. M. Williams.....	200,115	Feb. 5, 1878	227	69	13	268
Spinning-machinery, Spindle for.....	F. J. Rabbeth.....	210,357	Nov. 26, 1878	915	.....	14	814
Spinning-machines, Flier-bearing for.....	E. A. Cowper.....	203,424	May 7, 1878	199	57	13	847
Spinning-machines, Spindle-bearing for.....	J. Birkenhead.....	205,718	July 9, 1878	289	85	14	40
Spinning-machines, Spindle-bearing for.....	W. C. Macomber.....	209,489	Oct. 29, 1878	1134	331	14	632
Spinning-machines, Spindle-step for.....	W. M. Steele.....	201,847	Mar. 26, 1878	1074	327	13	589
Spinning-mule.....	E. A. Baldwin.....	209,317	Oct. 29, 1878	956	279	14	657
Spinning-mule.....	J. Hackaley.....	205,380	June 25, 1878	1031	305	13	1169
Spinning mules and jacks, Winding-on regulator for.....	C. H. Colbrook.....	203,244	May 7, 1878	8	3, 4	13	822
Spinning-mules, Automatic clearer for.....	S. Mock.....	200,912	Nov. 12, 1878	406	122	14	719
Spinning-mules, Cop-building rail for.....	J. Ogden and J. Garrett.....	204,362	May 28, 1878	1231	350	13	999
Spinning-mules, Shipping mechanism for.....	A. Howland and H. Lawton.....	198,742	Jan. 1, 1878	12	3	13	10
Spinning-mules, Winding-on mechanism for.....	G. Gurney.....	204,214	May 28, 1878	1081	308	13	969
Spinning or twisting machines, Stop-motion for.....	J. H. Knowles.....	200,694	Nov. 5, 1878	171	51	14	704
Spinning-ring.....	D. J. Hurley.....	204,489	June 4, 1878	67	23	13	1022
Spinning-ring.....	C. E. Trowbridge.....	201,362	Mar. 12, 1878	493	152	13	495
Spinning-ring.....	J. W. Wattles.....	199,604	Jan. 22, 1878	920	261	13	168
Spinning-ring.....	J. W. Wattles.....	206,968	Aug. 13, 1878	349	107	14	253
Spinning-ring.....	F. H. Wheat.....	203,683	May 14, 1878	479	136	13	836
Spinning-ring and spindle support.....	J. Birkenhead.....	210,400	Dec. 3, 1878	9	3	14	826
Spinning-ring and traveler.....	E. T. Lanphear.....	204,832	June 11, 1878	434	127	13	1673
Spinning-ring holder, &c.....	G. D. Edmonds.....	203,606	May 14, 1878	402	114	13	883
Spinning-ring holder.....	J. W. Wattles.....	206,155	July 16, 1878	772	221	14	114
Spinning-rings and their holders, Adjusting device for.....	C. E. Trowbridge.....	207,693	Sept. 3, 1878	108	33	14	363
Spinning-spindle.....	J. C. Stanley.....	209,199	Oct. 22, 1878	835	241	14	616
Spinning yarn on spinning-mules.....	E. A. Baldwin.....	209,318	Oct. 29, 1878	958	289	14	637
Spiral spring.....	G. E. Gray.....	202,019	Apr. 2, 1878	156	45	13	621
Spiral spring.....	R. Vose.....	199,945	Feb. 5, 1878	57	18	13	242
Spiral springs, Machine for coiling.....	G. F. Godley.....	209,254	Oct. 22, 1878	883	257	14	624
Spittoon.....	T. W. Barnhill.....	205,033	June 18, 1878	654	193	13	1165
Spittoon.....	E. A. Heath.....	206,322	July 23, 1878	984	280	14	145
Spittoon.....	E. A. Heath.....	206,324	July 23, 1878	986	280	14	146
Spittoon.....	T. Loughran.....	208,981	Oct. 15, 1878	579	163	14	577
Spittoon, Dental.....	G. W. Archer.....	210,484	Dec. 3, 1878	95	24	14	836
Spittoon, Pocket.....	M. Holden.....	208,392	Sept. 24, 1878	884	277	14	473
Splint-cutting machine.....	W. Lynch.....	201,806	Mar. 26, 1878	1032	315	13	583
Spoke-dressing machine.....	J. L. Brown.....	201,592	Mar. 26, 1878	822	250	13	532
Spoke-tenoning and felly-boring machine.....	H. S. Barnes and J. I. Miller.....	200,598	Feb. 26, 1878	744	218	13	371
Spoke-tenoning machine.....	R. W. Eaton.....	200,649	Feb. 26, 1878	796	234	13	379
Spoke-throating machine.....	G. R. Cramer.....	204,801	June 11, 1878	396	116	13	1069
Spoke-trimmer.....	P. Barringer.....	203,214	Oct. 22, 1878	849	245	14	618
Sponge-holder for mucilage bottles.....	J. S. Mercer.....	206,469	July 30, 1878	1163	333	14	172
Spool and bobbin.....	O. E. Wait.....	208,774	Oct. 8, 1878	341	98	14	541
Spool-box.....	G. Harrington.....	199,644	Jan. 29, 1878	989	288	13	136
Spool-holder.....	E. Rice.....	204,758	June 11, 1878	348	105	13	1064
Spool-holder and game device, Combined.....	E. MacEwan.....	206,740	Aug. 6, 1878	84	26, 27	14	217
Spool rack, Rope.....	B. F. Felix and W. Schamweber.....	199,631	Jan. 29, 1878	977	284	13	184

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Spools, Machine for making metallic	L. Brightman	210,088	Nov. 19, 1878	611	182	14	770
Spools or bobbins, Device for unwinding thread from	W. E. Turner	205,320	June 25, 1878	967	286	13	1152
Spooling-machine	T. Kershaw	202,549	Apr. 16, 1878	751	217	13	711
Spooling-machine bobbin-holder	H. Doak	199,040	Jan. 8, 1878	327	96	13	66
Spooling-machine bobbin-supporter	A. H. Carroll	206,085	July 16, 1878	687	198	14	105
Spoon and ladle	J. Scheider	200,670	Feb. 26, 1878	819	241	13	382
Spoon-holder	H. B. Beach	208,706	Oct. 8, 1878	268	76	14	532
Spoon, Medicine	E. K. Walker	201,369	Mar. 19, 1878	579	178	13	514
Spoons, Making sheet-metal	M. Fowler	202,431	Apr. 16, 1878	617	181	13	694
Spring:							
See Bed-spring.	Seat-spring.						
Car-spring.	Side spring.						
Carriage-spring.	Spiral spring.						
Corset-spring.	Vehicle-spring.						
Door-spring.	Vehicle side-spring.						
Elliptic spring.	Vehicle torsion-spring.						
Horseshoe-spring.	Wagon-spring.						
Mattress-spring.	Wagon-seat spring.						
Pistol-spring.	Watch-case spring.						
Platform-spring.							
Spring-balance	C. Forschner	202,807	Apr. 23, 1878	1040	299	13	755
Spring-hook	G. E. Perrin	198,813	Jan. 1, 1878	94	26	13	22
Spring locks and latches, Striker for	W. H. Taylor	201,572	Mar. 19, 1878	787	239	13	543
Spring motor	F. D. Everett and A. Dubroy	202,010	Apr. 2, 1878	146	43	13	620
Spring motor	E. B. Rice	200,843	Mar. 5, 1878	30	11	13	419
Spring motor	J. Schreiber	199,470	Jan. 22, 1878	778	228	13	146
Spring motor	E. Shiver	205,690	July 2, 1878	242	72, 73	14	39
Springs, Device for retarding the recoil of	C. J. A. Dick and T. L. Luders	207,020	Aug. 13, 1878	381	117	14	257
Springs, Device for retarding the recoil of	C. J. A. Dick	207,021	Aug. 13, 1878	382	117	14	257
Springs, Utilizing worn-out	F. Hutchinson and W. H. Graham	201,420	Mar. 19, 1878	631	193	13	521
Sprinkler:							
See Clothes-sprinkler.	Well-sprinkler.						
Garden-sprinkler.	Window, door, and shut-						
Lawn-sprinkler.	ter sprinkler.						
Sprinkler	W. B. Allen	209,372	Oct. 29, 1878	1018	296	14	645
Sprinkler	W. S. Doughty	202,334	Apr. 16, 1878	521	153	13	681
Sprinkler	J. M. Josias	204,333	May 28, 1878	1200	342	13	995
Sprinkler	J. E. New	203,487	May 7, 1878	264	76	13	857
Sprinkler	A. S. Pennington and E. Beggs	203,069	Apr. 30, 1878	1312	381	13	794
Sprinkling-pipe	F. Grinnell	201,242	Mar. 12, 1878	429	132	13	486
Square	S. Loneragan	206,463	July 30, 1878	1157	332	14	171
Square, Adjustable centering	H. B. Little	202,180	Apr. 9, 1878	346	101	13	652
Square and protractor, Centering	E. Ericson	199,425	Jan. 22, 1878	736	216	13	139
Square and rule, Glaziers'	J. M. Kurtz	208,104	Sept. 17, 1878	563	168	14	429
Square, bevel, and miter, Try	E. H. Eaton	204,428	June 4, 1878	13	5	13	1014
Square, bevel, &c., Combined	A. F. Dickey	205,843	July 9, 1878	424	121	14	66
Square, Dress-makers'	J. F. Wingate	204,120	May 21, 1878	954	273	13	960
Square for garments, Drafting	C. H. Griffin	206,315	July 23, 1878	971	276	14	144
Square, Spacing T.	J. D. Day	199,192	Jan. 15, 1878	498	146	13	94
Square, Try	H. Owen	200,628	Feb. 26, 1878	772	227	13	375
Stair-rod securer	C. E. Stearns	206,497	July 30, 1878	1196	343	14	175
Stalk-chopper	J. B. Baird	208,556	Oct. 1, 1878	89	29	14	502
Stalk-cutter	S. B. and H. J. Adams	203,311	May 7, 1878	82	24	13	831
Stalk-cutter	E. Dominy	203,010	Apr. 30, 1878	1257	364	13	786
Stalk-puller	J. H. Smith	201,562	Mar. 19, 1878	775	236	13	541
Stalk trimmer and cutter	L. J. Bodenhamer	205,470	July 2, 1878	7	3	14	10
Stall cushion, Horse	H. B. Clark	204,655	June 11, 1878	239	75	13	1050
Stall for vessels, Horse	H. P. Kirkham	201,253	Mar. 12, 1878	429	135	13	487
Stall for vessels, Horse and cattle	B. Albee	200,102	Oct. 22, 1878	729	211	14	603
Stall, Horse	J. H. Clark	199,411	Jan. 22, 1878	724	213	13	137
Stamp, Branding	W. L. Gamago	206,770	Aug. 13, 1878	822	74	14	239
Stamp, Branding	M. T. Perkins	206,355	July 23, 1878	1022	292	14	150
Stamp-canceler, Electric	E. S. Dow	206,546	July 30, 1878	1239	356	14	181
Stamp, Canceling	H. A. Coats	199,185	Jan. 15, 1878	493	145	13	93
Stamp, Canceling	E. D. W. Hatch	206,727	Aug. 6, 1878	72	23	14	215
Stamp, Canceling	W. Krutzsch	207,125	Aug. 20, 1878	501	151	14	276
Stamp-canceling device	G. L. Neville and L. C. Godwin	205,292	June 25, 1878	935	277	13	1148
Stamp, Combined dating and canceling	C. Armstrong, R. G. Woodward, and L. Muther	210,286	Nov. 26, 1878	835	246	14	803
Stamp drying machine	J. F. Seymour	210,472	Dec. 3, 1878	86	21	14	835
Stamp-gumming apparatus	J. F. Seymour	208,640	Oct. 1, 1878	187	54	14	514
Stamp, Hand	E. D. Chamberlain	204,421	June 4, 1878	7	3	13	1013
Stamp, Hand	E. Gumbis	210,457	Dec. 3, 1878	71	18	14	833
Stamp, Hand	B. B. Hill	203,915	May 21, 1878	736	211	13	933
Stamp, Hand	W. H. Keeler	199,295	Jan. 15, 1878	597	174	13	109
Stamp, Hand	W. T. Morgans	199,400	Jan. 22, 1878	770	226	13	144
Stamp, Hand branding	H. Wickham, Jr.	200,418	Feb. 19, 1878	548	162	13	333
Stamp, Hand canceling	B. B. Hill	203,914	May 21, 1878	735	211	13	933
Stamp-mill	J. M. McFarland	201,692	Mar. 26, 1878	915	280	13	566
Stamp-mills, Guide for the stems of	F. P. Picking	203,573	July 2, 1878	119	35	14	24
Stamp, Ore	F. A. Huntington	210,610	Dec. 10, 1878	250	69	14	835
Stamp, Ore	Z. L. Kay	209,171	Oct. 22, 1878	807	234	14	612
Stamp, Ore	S. Kendall	209,896	Nov. 12, 1878	390	116	14	737
Stamp, Ore	S. Kendall	210,940	Dec. 17, 1878	626	174	14	9 2
Stamp, Perforating	H. H. Norington	209,915	Nov. 12, 1878	409	123	14	740
Stamp, Pneumatic fountain	W. A. Roberts and M. E. Gary	201,048	Mar. 5, 1878	229	72	13	450
Stamp, Postage	J. Dewe	200,702	Feb. 26, 1878	854	251	13	87
Stamp, Postage	J. Fox	200,187	Feb. 12, 1878	306	91	13	188
Stamp, Postage	J. Sangster	202,700	Apr. 23, 1878	988	284	13	748
Stamp, Postage and revenue	A. C. Fox	201,769	Mar. 26, 1878	597	305	13	578
Stamp, Postage and revenue	C. F. Spencer	208,433	Sept. 24, 1878	920	273	14	479
Stamp-recording cabinet, Postage	H. T. Taggart	209,728	Nov. 5, 1878	297	62	14	708
Stamp, Revenue	J. Bowles and A. P. Eastlake	210,661	Dec. 10, 1878	305	84	14	872





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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Steam-boilers, Crown-sheet for	W. S. Hudson	198,743	Jan. 1, 1878	13	3	13	10
Steam-boilers, Device for removing dirt, &c., from	A. Collins	208,794	Oct. 8, 1878	305	104	14	545
Steam-boilers, Heating and feeding water for	S. M. Fulton	198,737	Jan. 1, 1878	6	1	13	9
Steam-boilers, Heating attachment for	H. Park	207,298	Aug. 20, 1878	676	201	14	298
Steam-boilers, High and low water indicator for	A. W. Vanderston	190,598	Jan. 22, 1878	915	268	13	167
Steam-boilers, Low-water signal for	T. Bingham and T. J. McTighe	201,588	Mar. 26, 1878	818	249	13	551
Steam-boilers, Preventing incrustation in	J. North	190,309	Jan. 15, 1878	611		13	111
Steam-boilers, Shaking-grate bar for	R. J. Cram	201,752	Mar. 26, 1878	976	298	13	575
Steam-boilers, Water-heater for	J. A. McCormick	208,479	Oct. 1, 1878	27	8	14	492
Steam-boilers, Water-indicator for	W. C. Wolfe	206,381	July 23, 1878	1053	303	14	153
Steam-brake, Locomotive	J. Hickey	203,454	May 7, 1878	232	66	13	852
Steam, Device for absorbing the noise of escaping	G. H. Buzzell	199,512	Jan. 22, 1878	824	241	13	153
Steam diaphragm-meter	C. Holly	209,048	Oct. 15, 1878	655	189	14	587
Steam-engine	J. Baird	203,989	May 21, 1878	816	234	13	943
Steam-engine	C. H. Burton	209,750	Nov. 12, 1878	244	72, 73	14	718
Steam-engine	J. G. Cooper	199,961	Feb. 5, 1878	71	23	13	244
Steam-engine	J. B. Crawley	205,360	June 25, 1878	1012	299	13	1157
Steam-engine	G. E. Dow	206,708	Aug. 6, 1878	52	16	14	213
Steam-engine	F. A. Gardner	206,555	July 30, 1878	1252	360	14	183
Steam-engine	J. Holub	199,978	Feb. 5, 1878	86	28	13	246
Steam-engine	B. F. Montague	209,974	Nov. 19, 1878	490	149	14	754
Steam-engine	D. Turner	202,894	Apr. 23, 1878	1132	326	13	766
Steam engine and pump	J. G. Baker	207,936	Sept. 10, 1878	381	115	14	400
Steam-engine boiler	G. E. Banner	203,698	May 14, 1878	498	141	13	895
Steam-engine, Compound	A. Vile	205,817	July 9, 1878	399	115	14	63
Steam-engine cylinder	G. E. Banner	204,282	May 28, 1878	1145	327	13	988
Steam-engine for cotton-presses	C. E. Emery	201,397	Mar. 19, 1878	611	187	13	518
Steam-engine for sewing-machines	J. J. Carter	200,895	Mar. 5, 1878	78	27	13	427
Steam-engine lubricator	G. W. Farnham	201,402	Mar. 19, 1878	619	188	13	519
Steam-engine lubricator	A. Guild and F. B. Clark	200,053	Feb. 5, 1878	163	53	13	259
Steam-engine lubricator	S. Reid	199,745	Jan. 29, 1878	1082	317	13	201
Steam-engine, Portable	W. Baxter	207,237	Aug. 20, 1878	614	184	14	290
Steam-engine, Portable	W. H. Tappey	207,082	Aug. 13, 1878	439	136	14	264
Steam-engine regulator	N. G. Herreshoff	199,544	Jan. 22, 1878	859	251	13	158
Steam-engine regulator	C. C. Jenkins	204,828	June 11, 1878	423	126	13	1072
Steam-engine standard and cylinder	G. E. Banner	204,283	May 28, 1878	1146	328	13	988
Steam-engines, Application of superheated steam to	R. Seilliere and L. M. T. Riot	202,591	Apr. 16, 1878	792	229	13	715
Steam-engines, Condenser for	S. A. Goodwin	210,519	Dec. 3, 1878	138	36	14	841
Steam-engines, Exhaust mechanism for locomotive and other	H. G. Ashton	201,862	Apr. 2, 1878	5	1	13	599
Steam-engines, &c., Indicator for	H. Tabor	210,643	Dec. 10, 1878	287	79	14	870
Steam-gage	R. C. Blake	210,179	Nov. 26, 1878	723	215	14	789
Steam-gage	C. R. Vaillant	207,696	Sept. 3, 1878	111	33	14	363
Steam-gage siphon	J. A. Prindle	204,449	June 4, 1878	34	11	13	1017
Steam-generating apparatus	W. F. Browne	210,494	Dec. 3, 1878	105	28	14	838
Steam-generator	J. G. Baker	206,998	Aug. 13, 1878	360	110	14	254
Steam-generator	W. T. Bate	207,940	Sept. 10, 1878	386	116	14	400
Steam-generator	J. W. Bookwalter	204,792	June 11, 1878	387	115	13	1068
Steam-generator	W. F. Browne	208,711	Oct. 8, 1878	273	78	14	533
Steam-generator	W. F. Browne	208,790	Oct. 8, 1878	355	102	14	544
Steam-generator	A. J. Collinge and B. M. Savage	204,201	May 28, 1878	1068	304	13	978
Steam-generator	M. Cullen	204,203	May 28, 1878	1070	305	13	979
Steam-generator	J. and G. Firmenich	210,312	Nov. 26, 1878	862	253	14	807
Steam-generator	T. P. Franke	203,721	May 14, 1878	520	148	13	898
Steam-generator	S. T. Hyde	203,157	Apr. 30, 1878	1406	410	13	806
Steam-generator	T. L. Jones	199,648	Jan. 29, 1878	995	289	13	187
Steam-generator	J. Schofield and D. D. Pryor	211,058	Dec. 17, 1878	775	212	14	939
Steam-generator	G. B. N. Tower	207,831	Sept. 10, 1878	263	82	14	386
Steam-generator, Coil	W. S. Salisbury	200,482	Feb. 19, 1878	611	180	13	343
Steam-generator, Sectional	H. Heine	200,294	Feb. 12, 1878	411	123	13	304
Steam-generator, Sectional	G. Marshall, T. Ibbotson, and J. Bailey	210,135	Nov. 19, 1878	663	197	14	777
Steam-generator, Sectional	J. J. Roeper	203,197	Apr. 30, 1878	1451	442	13	811
Steam-generator, Water-coil	W. S. Salisbury	200,938	Mar. 5, 1878	116	39	13	433
Steam-generator, Water-tube	A. D. Brock	199,782	Jan. 29, 1878	1118	329	13	206
Steam-generator, Water-tube	W. P. Trowbridge	198,963	Jan. 1, 1878	141	40, 41	13	30
Steam-meter	C. Holly	210,328	Nov. 26, 1878	881	259	14	809
Steam, Muffler for the escape of exhaust	W. H. Swift	209,939	Nov. 12, 1878	437	133	14	743
Steam pipes, boilers, &c., Covering for	J. A. Maloney	208,530	Oct. 1, 1878	74	22	14	499
Steam pipes, generators, &c., Covering for	H. Burgess	208,791	Oct. 8, 1878	362	103	14	544
Steam-superheater	W. Standing	204,173	May 28, 1878	1032	294	13	974
Steam-trap	H. W. Beins	209,601	Nov. 5, 1878	68	20	14	690
Steam-trap	J. H. Blessing	207,484	Aug. 27, 1878	883	260	14	329
Steam-trap	J. L. Chapman	202,520	Apr. 16, 1878	701	205	13	706
Steam-trap	L. P. Hawes	208,520	Oct. 1, 1878	64	20	14	498
Steam-trap	J. L. Parry	208,630	Oct. 1, 1878	176	51	14	512
Steam-trap	R. T. Pascall	206,748	Aug. 6, 1878	91	29	14	218
Steam-trap	J. Ryan	202,759	Apr. 23, 1878	987	284	13	748
Steam-trap	L. F. Smith	206,361	July 22, 1878	1029	295	14	151
Steam-trap, Expansion	J. J. Royle	209,424	Oct. 29, 1878	1068	310	14	653
Steam-trap, Return	T. E. McNeill	206,344	July 23, 1878	1009	287	14	148
Steam, vapor, and medical bathing apparatus	J. De Beer	208,666	Oct. 8, 1878	225	65	14	527
Steamer and drier, Grain	F. A. Hoffmann	205,551	July 2, 1878	92	26	14	20
Steamer, Culinary	H. T. King	198,769	Jan. 1, 1878	49	13	13	15
Steamer, Feed	W. H. Allard	208,135	Sept. 17, 1878	601	178	14	434
Steamer, Feed	F. Bigalow	206,075	July 16, 1878	678	196	14	103
Steamer, Feed	W. S. Craine and C. D. Gaylord	206,864	Aug. 13, 1878	228	73	14	239



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Steamer, Feed.....	D. D. Darling, L. L. Parshall, and F. H. Wendell.	202,706	Apr. 23, 1878	933	267	13	741
Steamer, Feed.....	W. K. Hill.	201,921	Apr. 2, 1878	63	17	13	608
Steamer, Feed.....	A. W. Humphry.	200,537	Feb. 19, 1878	663	195	13	351
Steamer, Feed.....	D. Machamer and J. McCulloch	209,063	Oct. 15, 1878	677	195	14	590
Steamer, Feed.....	W. M. Parker and W. W. Yokom	205,409	June 25, 1878	1057	314	13	1163
Steamer, Feed.....	G. W. Van Buren, jr.	204,514	June 4, 1878	86	29	13	1625
Steamer or boiler for feed.	F. E. Mills and C. Clager.	203,636	May 14, 1878	429	123	13	887
Steaming-table and heating-oven combined	W. T. Shaw and G. W. Menz.	200,094	Feb. 5, 1878	205	64	13	285
Steel, Apparatus for hardening and tempering sheet.	A. Lüttges.	198,804	Jan. 1, 1878	87	24	13	21
Steel, Bath for tempering.	J. Humphreys.	201,824	June 11, 1878	418	123	13	1071
Steel, Manufacture of.	F. Berchtold.	210,745	Dec. 10, 1878	393	.....	14	883
Steel, Tempering.	G. Banister.	204,788	June 11, 1878	385	.....	13	1097
Steel, Utilizing scrap.	T. M. Carnegie.	202,517	Apr. 16, 1878	697	.....	13	705
Steering apparatus.	T. Spear.	201,360	Mar. 19, 1878	572	176	13	513
Steering apparatus, Steam.	J. P. Mantion.	208,833	Oct. 8, 1878	404	117	14	551
Steering apparatus, Steam.	S. G. Martin.	209,822	Nov. 12, 1878	314	94	14	727
Steering apparatus, Steam.	J. C. McAllister.	211,034	Dec. 17, 1878	744	204	14	935
Steering apparatus, Steam or hydraulic.	J. Gates.	208,231	Sept. 24, 1878	716	{ 210 211 }	14	452
Stem-winders, Crown-push for.	J. J. Peux.	202,459	Apr. 16, 1878	644	188	13	698
Stench or basin trap valve.	W. E. Worth.	207,472	Aug. 27, 1878	870	257	14	327
Stench-trap.	B. J. Downey.	207,492	Aug. 27, 1878	894	203	14	330
Stench-trap.	H. R. Frisbie.	210,196	Nov. 26, 1878	741	220	14	791
Stench-trap.	T. G. Knight.	202,176	Apr. 9, 1878	343	100	13	652
Stench-trap.	R. G. M. Nowell.	202,860	Apr. 23, 1878	1095	314	13	762
Stench-trap.	M. Wilson.	201,317	Mar. 12, 1878	514	157	13	497
Stench-trap, Sewer-pipe.	L. H. Colborne.	203,590	May 14, 1878	389	110	13	882
Stench-traps, Vacuum-valve for.	B. J. Downey.	208,379	Sept. 24, 1878	871	253	14	473
Stench-valve for wash-basins.	A. Levery.	203,745	May 14, 1878	547	155	13	901
Stencil.	C. H. Dana.	204,803	June 11, 1878	399	117	13	1069
Stencil-plate.	A. C. Barnes, jr.	203,992	May 21, 1878	820	235	13	943
Stencil-plate.	D. G. Garretson.	199,197	Jan. 8, 1878	502	148	13	95
Stereoscope.	W. H. Lewis.	201,804	Mar. 26, 1878	1030	314	13	583
Stereotype-block.	A. Henning.	205,208	June 25, 1878	907	268	13	1144
Stereotype-plates, Means for holding.	A. N. Kellogg.	208,181	Sept. 17, 1878	652	191	14	441
Still-column.	E. Smeeth and G. P. Harris.	204,919	June 18, 1878	545	{ 158 159 }	13	1091
Still, Oil.	G. Miles.	205,407	June 25, 1878	1056	313	13	1163
Still, Oil.	O. Tilton.	209,943	Nov. 12, 1878	442	134	14	744
Stills.	L. Bordewich.	202,782	Apr. 23, 1878	1011	290	13	751
Stirrup.	M. T. Burke.	204,420	June 4, 1878	6	3	13	1013
Stirrup.	O. V. Flora.	209,117	Oct. 22, 1878	750	218	14	605
Stirrup.	R. S. Wiley.	202,974	Apr. 30, 1878	1225	354	13	782
Stirrup.	G. M. Wilson.	203,807	May 14, 1878	613	171	13	909
Stirrup-planing machine.	W. W. Krutusch.	208,183	Sept. 17, 1878	654	192	14	441
Stirrup, Saddle.	M. T. Burke.	202,926	Apr. 30, 1878	1178	339	13	776
Stirrup, Saddle.	J. M. Freeman.	208,972	Oct. 15, 1878	572	166	14	576
Stitch-ripper.	J. F. Buddlong.	208,459	Oct. 1, 1878	7	2	14	489
Stocking.	A. Selby.	210,810	Dec. 10, 1878	461	129	14	892
Stocking drier and stretcher.	P. W. Whitcomb.	202,498	Apr. 16, 1878	678	199	13	709
Stocking-supporter.	F. Armstrong.	202,394	Apr. 16, 1878	579	170	13	689
Stocking-supporter.	F. B. Brown.	210,666	Dec. 10, 1878	312	85	14	873
Stocking-supporter.	C. W. Foster.	206,552	July 30, 1878	1246	359	14	182
Stocking-supporter.	W. F. George.	208,387	Sept. 24, 1878	878	255	14	473
Stocking-supporter.	J. Jenkins.	201,532	Mar. 19, 1878	744	227	13	537
Stocking supporter and clasp.	C. C. Shelby.	209,778	Nov. 12, 1878	270	80	14	721
Stocking-supporting clasp.	L. Loebenstein.	207,666	Sept. 3, 1878	84	25	14	359
Stone and glass polisher.	M. and P. C. Wright.	203,234	Apr. 30, 1878	1483	434	13	815
Stone-breaker.	S. L. Marsden.	198,849	Jan. 1, 1878	127	36	13	28
Stone by machinery, Splitting and shaping.	A. W. Andrews.	205,089	July 16, 1878	594	171	14	92
Stone, Compound for artificial.	E. H. Barrett.	205,824	July 9, 1878	406	.....	14	64
Stone-cutting tool.	R. L. Arendell.	200,014	Feb. 5, 1878	119	39	13	232
Stone-gatherer.	P. Van Order.	211,069	Dec. 17, 1878	785	216	14	940
Stone, Manufacture of artificial.	H. Bacon.	205,823	July 9, 1878	405	.....	14	64
Stone, Manufacturing artificial.	F. Koskul.	200,894	Mar. 5, 1878	21	.....	13	418
Stone, Manufacturing artificial.	F. Koskul.	200,835	Mar. 5, 1878	22	.....	13	418
Stone, Paving.	C. Brenner.	208,364	Sept. 24, 1878	857	.....	14	470
Stone-polishing machine.	P. Pitkin and J. B. Dougherty.	203,934	May 21, 1878	754	218	13	935
Stone, Preparing, finishing, and polishing the surfaces of artificial.	J. A. Mehling.	208,532	Oct. 1, 1878	75	.....	14	430
Stone preservative and renovating compound.	A. McLean.	201,032	Mar. 5, 1878	213	.....	13	447
Stone-sawing machine.	G. Jennings and J. L. Robellaz.	204,331	May 28, 1878	1198	{ 341 342 }	13	995
Stone-sawing machine.	W. Tuggey.	203,219	Apr. 30, 1878	1469	430	13	814
Stone-sawing machine.	H. Young.	200,593	Feb. 19, 1878	720	212	13	359
Stone-sawing machine.	H. Young.	200,594	Feb. 19, 1878	722	212	13	360
Stone-sawing machinery.	J. Langstaff.	199,160	Jan. 15, 1878	466	137	13	88
Stone, Treating artificial.	A. S. Johnson.	200,064	Feb. 5, 1878	173	56	13	250
Stone-working, mining, &c., Hand-drill for.	A. Nicol.	210,430	Dec. 3, 1878	41	10	14	829
Stool, Folding.	D. B. Oaks.	201,823	Mar. 26, 1878	1048	320	13	585
Stool, Piano.	J. Briggs.	210,593	Dec. 10, 1878	233	63	14	893
Stool, Piano.	J. Jennings.	208,823	Oct. 8, 1878	395	112	14	549
Stool, Piano.	J. W. McDonough.	209,498	Oct. 29, 1878	1145	333	14	664
Stopper?							
See Bottle-stopper.							
Stopper and stopper-fastener.	F. J. Seybold.	206,271	July 23, 1878	919	{ 260 261 }	14	138
Stopper-sleeve.	A. J. Haws.	205,084	June 18, 1878	707	210	13	1113
Store-fronts, Construction of.	C. J. Furst and C. Rudolph.	205,852	July 9, 1878	433	123	14	68
Store-house.	J. E. Walsh.	202,311	Apr. 9, 1878	477	{ 139 140 }	13	670
Storing-tank.	F. K. Plumby.	207,301	Aug. 20, 1878	678	202	14	290
Stove.	S. N. Betts.	203,528	May 14, 1878	325	92	13	873

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Stove.....	J. H. Blake.....	205,719	July 9, 1878	290	85, 86	14	40
Stove.....	G. F. Cobb.....	209,550	Nov. 5, 1878	13	4	14	683
Stove.....	J. W. Elliot.....	209,754	Nov. 12, 1878	248	74	14	718
Stove.....	J. H. Goodfellow.....	209,557	Nov. 5, 1878	21	7	14	684
Stove.....	J. H. Goodfellow.....	209,558	Nov. 5, 1878	22	7	14	684
Stove.....	C. A. Hamlin.....	205,743	July 9, 1878	316	92	14	52
Stove.....	J. B. Oldershaw.....	207,296	Aug. 20, 1878	674	200	14	298
Stove.....	J. H. Powell.....	209,982	Nov. 19, 1878	496	150	14	754
Stove.....	G. R. Prowse.....	206,198	July 23, 1878	840	240	14	127
Stove.....	J. G. Smith.....	209,721	Nov. 5, 1878	199	59	14	707
Stove.....	D. L. Stiles.....	202,297	Apr. 9, 1878	463	136	13	669
Stove and apparatus for extinguishing fire therein, Car.	J. F. Gyles.....	207,865	Sept. 10, 1878	300	91, 02	14	390
Stove and furnace grate.....	W. B. Geddes.....	202,102	Apr. 9, 1878	260	76	13	640
Stove and furnace grate.....	S. Smyth.....	208,767	Oct. 8, 1878	335	96	14	540
Stove and furnace lining.....	A. S. Hodges.....	198,940	Jan. 8, 1878	230	65	13	51
Stove and range grate.....	S. Smyth.....	199,752	Jan. 29, 1878	1089	319	13	202
Stove attachment.....	L. B. Lawrence and A. G. Straw- bridge.....	206,953	Aug. 13, 1878	316	96	14	249
Stove attachment, Coal.....	F. Dedolph.....	205,842	July 9, 1878	423	120	14	66
Stove-back lining.....	C. W. Warner.....	210,584	Dec. 3, 1878	214	56	14	851
Stove-back, Portable.....	W. C. Barkalow.....	202,777	Apr. 23, 1878	1004	289	13	750
Stove-base.....	J. M. Harper.....	208,812	Oct. 8, 1878	385	109	14	547
Stove-bottom.....	A. C. Stoessiger.....	209,085	Oct. 15, 1878	698	202	14	503
Stove-board.....	G. S. Stannard.....	202,883	Apr. 23, 1878	1122	322	13	765
Stove, Camp.....	W. B. Collier.....	206,422	July 30, 1878	1113	318	14	165
Stove, Camp.....	L. P. Vallbrecht.....	203,963	May 21, 1878	789	226	14	940
Stove, Car.....	F. C. Conley.....	199,414	Jan. 22, 1878	726	214	13	137
Stove, Coal-oil.....	J. M. Adams.....	207,637	Sept. 3, 1878	55	16	14	356
Stove, Coal-oil.....	S. D. Baldwin.....	199,952	Feb. 5, 1878	63	20	13	342
Stove, Coal-oil.....	J. A. Frey.....	199,280	Jan. 15, 1878	582	170	13	107
Stove, Coal-oil.....	W. Hailes and J. Gray.....	200,864	Mar. 5, 1878	49	17, 18	13	422
Stove, Cook.....	C. Truesdale.....	205,925	July 9, 1878	514	146	14	77
Stove, Cooking.....	W. A. Greene.....	209,806	Nov. 12, 1878	299	89, 90	14	725
Stove, Cooking.....	G. E. Hopkin.....	205,961	July 16, 1878	564	161	14	89
Stove, Cooking.....	J. A. Lawson.....	201,256	Mar. 12, 1878	442	{ 136 137 }	13	488
Stove, Cooking.....	J. A. Lawson.....	206,252	July 23, 1878	895	255	14	134
Stove, Cooking.....	R. S. Oliver.....	209,355	Oct. 29, 1878	999	{ 290 291 }	14	642
Stove, Cooking.....	D. E. Paris.....	207,297	Aug. 20, 1878	675	201	14	298
Stove, Cooking.....	H. R. Smith.....	203,084	Apr. 30, 1878	1328	326	13	796
Stove, Cooking.....	D. Stuart.....	204,112	May 21, 1878	947	271	13	959
Stove, Cooking.....	C. Temme.....	206,503	July 30, 1878	1201	{ 344 345 }	14	176
Stove, Cooking.....	T. B. Tufts.....	207,142	Aug. 20, 1878	516	156	14	278
Stove, Cooking.....	G. W. Walker.....	202,204	Apr. 9, 1878	368	108	13	655
Stove, Cooking.....	G. W. Walker.....	202,205	Apr. 9, 1878	369	108	13	655
Stove, Cooking.....	G. G. Wolfe.....	200,811	Feb. 26, 1878	959	283	13	403
Stove, Cooking.....	H. A. Wood.....	205,939	July 9, 1878	527	150	14	79
Stove, Cooking and heating.....	C. A. Hamlin.....	207,604	Sept. 3, 1878	19	7, 8	14	352
Stove-cover.....	A. J. Sennett.....	204,623	June 4, 1878	201	64	13	1041
Stove-cover and check-damper, Combined.....	H. Ritter.....	209,081	Oct. 15, 1878	694	201	14	592
Stove-door.....	G. Sard, jr.....	199,938	Feb. 5, 1878	51	16	13	240
Stove-door.....	C. Temme.....	206,504	July 30, 1878	1202	345	14	176
Stove-door and window.....	D. L. Stiles.....	202,296	Apr. 9, 1878	463	135	13	668
Stove-door knob.....	W. Cunliff.....	210,673	Dec. 10, 1878	320	87	14	874
Stove-door knob.....	H. A. Tweed.....	210,065	Nov. 19, 1878	584	175	14	766
Stove-doors, Turnkey or handle for.....	H. A. Matthews.....	209,573	Nov. 5, 1878	40	11	14	686
Stove, Drum.....	J. Gilson.....	210,933	Dec. 17, 1878	619	172	14	921
Stove, Elevated-oven cooking.....	J. Jewett.....	203,546	May 14, 1878	346	99	13	876
Stove, Evaporator.....	F. E. Cudell.....	201,162	Mar. 12, 1878	345	106	13	474
Stove fire-box.....	J. A. Lawson.....	201,255	Mar. 12, 1878	441	136	13	487
Stove fire-place.....	M. McNamara.....	208,028	Sept. 17, 1878	491	146	14	419
Stove for burning crude hydro-carbon and other oils.....	P. Martin.....	204,349	May 28, 1878	1215	347	13	997
Stove, Gas.....	W. M. Jackson.....	205,391	June 25, 1878	1042	309	13	1161
Stove, Gas or oil.....	E. A. Jackson.....	204,490	June 4, 1878	68	23	13	1022
Stove, Gasoline cooking.....	H. Wellington.....	200,636	Feb. 26, 1878	778	229	13	376
Stove-grate.....	P. D. Beckwith.....	206,074	July 16, 1878	677	196	14	104
Stove-grate.....	J. A. Lawson.....	199,296	Jan. 15, 1878	599	175	13	109
Stove-grate.....	W. McClave and J. A. Price.....	202,449	Apr. 16, 1878	636	186	13	697
Stove-grate.....	H. Miller.....	206,033	July 16, 1878	636	184	14	98
Stove-grate.....	A. Nicol.....	204,911	June 18, 1878	534	156	13	1090
Stove-grate.....	J. A. Price.....	201,630	Mar. 26, 1878	863	262	13	557
Stove-grate.....	J. A. Price.....	205,503	July 2, 1878	42	13	14	14
Stove-grate, Reversible.....	J. A. Price and W. McClave.....	205,680	July 2, 1878	233	69	14	38
Stove-grate, Shaking.....	W. Miller.....	207,670	Sept. 3, 1878	87	26	14	360
Stove-handle.....	J. M. Harper.....	209,889	Nov. 12, 1878	385	115	14	736
Stove-hearth.....	S. A. Kinsey.....	203,278	May 7, 1878	42	13	13	826
Stove, Heating.....	M. Campbell.....	203,117	Apr. 30, 1878	1358	395	13	800
Stove, Heating.....	L. Fagin.....	209,876	Nov. 12, 1878	373	112	14	735
Stove, Heating.....	T. Gemmell.....	201,238	Mar. 12, 1878	426	{ 130 131 }	13	485
Stove, Heating.....	F. J. Gould.....	202,718	Apr. 23, 1878	943	270	13	742
Stove, Heating.....	M. C. Hawley.....	203,269	May 7, 1878	34	10, 11	13	825
Stove, Heating.....	J. M. Sycks.....	200,006	Feb. 5, 1878	110	36	13	256
Stove, Heating.....	J. Van Wormer.....	206,372	July 23, 1878	1043	299	14	152
Stove, Heating and ventilating.....	J. R. Walls.....	199,672	Jan. 29, 1878	1018	296	13	190
Stove, Lamp.....	E. Hunter.....	209,567	Nov. 5, 1878	34	10	14	685
Stove, Laundry.....	J. Voegtli.....	206,407	July 30, 1878	1098	314	14	164
Stove-leg.....	F. S. Berry.....	199,777	Jan. 29, 1878	1112	326	13	205
Stove-leg.....	H. H. Huntley.....	200,538	Feb. 19, 1878	664	196	13	351
Stove-leg.....	I. T. Montross.....	204,839	June 11, 1878	440	129	13	1074
Stove-leg.....	J. E. Pope and J. S. Anthony.....	199,931	Feb. 5, 1878	44	14	13	239

*Alphabetical list of inventions—Continued.*

Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Stove-leg .....	R. D. Ryerson .....	206,488	July 30, 1878	1185	341	14	174
Stove-leg .....	D. Walther .....	199,763	Jan. 29, 1878	1100	323	13	204
Stove-leg fastening .....	W. B. Houston .....	205,746	July 9, 1878	319	93	14	53
Stove-lid .....	S. F. White .....	208,551	Oct. 1, 1878	93	28	14	501
Stove, Magazine .....	W. W. Baldwin .....	205,232	June 25, 1878	874	{ 158 259 }	13	1140
Stove, Oil .....	D. W. Goodell .....	204,557	June 4, 1878	126	42	13	1630
Stove, Oil .....	T. Hall and T. J. Whitney .....	200,056	Feb. 5, 1878	166	54	13	259
Stove, Oil .....	H. L. Howse .....	208,317	Sept. 24, 1878	809	236	14	464
Stove, Oil .....	A. F. Kibbe .....	199,981	Feb. 5, 1878	89	29, 30	13	247
Stove, Oil .....	P. Martin .....	199,456	Jan. 22, 1878	767	{ 224 225 }	13	144
Stove, Oil .....	P. Martin .....	205,113	June 18, 1878	734	218	13	1116
Stove, Oil .....	P. Martin .....	208,108	Sept. 17, 1878	567	170	14	450
Stove, Oil .....	D. Shields and R. Z. Liddle .....	200,770	Feb. 26, 1878	918	270	13	307
Stove or furnace grate .....	I. G. Macfarlane .....	205,883	July 9, 1878	466	133	14	71
Stove or lamp, Oil .....	E. Blackman .....	203,994	May 21, 1878	822	236	13	944
Stove-oven .....	E. Bussey .....	200,975	Mar. 5, 1878	152	49	13	439
Stove-oven .....	S. Darling .....	209,332	Oct. 22, 1878	973	283	14	639
Stove-oven shelf .....	C. N. Buzzell .....	200,432	Feb. 19, 1878	563	166	13	335
Stove-oven shelf .....	B. F. Clement .....	203,242	May 7, 1878	5	2	13	821
Stove-ovens, Platform-door for .....	E. C. Little and D. H. Nation .....	205,754	July 9, 1878	329	95	14	54
Stove-ovens, Turn-table for .....	E. Barrows .....	199,013	Jan. 8, 1878	304	89	13	63
Stove, Parlor .....	T. V. Curtis .....	208,076	Sept. 17, 1878	536	160	14	426
Stove, Petroleum .....	G. G. Wolfe .....	208,659	Oct. 1, 1878	210	60	14	517
Stove-pipe .....	J. S. Williams .....	206,204	July 23, 1878	848	241	14	128
Stove-pipe, Adjustable .....	J. Harrison .....	208,813	Oct. 8, 1878	386	109	14	548
Stove-pipe adjuster .....	J. F. Rowlett .....	205,908	July 9, 1878	494	141	14	75
Stove-pipe elbow .....	W. P. Cook .....	199,618	Jan. 29, 1878	963	280	13	182
Stove-pipe elbows, Machine for cutting blanks for .....	W. Redett .....	210,434	Dec. 3, 1878	45	11	14	830
Stove-pipe expander and contractor .....	M. Brown .....	209,452	Oct. 29, 1878	1098	319	14	657
Stove-pipe-joint lock .....	H. Imhof .....	198,886	Jan. 1, 1878	168	47	13	34
Stove-pipe shelf .....	J. W. Woolsey .....	202,501	Apr. 16, 1878	680	200	13	704
Stove-pipe shelf .....	W. L. Hess .....	204,570	June 4, 1878	138	46	13	1632
Stove-pipe shelf .....	T. Hill .....	205,087	June 18, 1878	710	210	13	1113
Stove-pipe shelf .....	L. W. Turner .....	208,938	Oct. 15, 1878	532	156	14	571
Stove-pipe shelf .....	R. G. Yonge .....	201,081	Mar. 5, 1878	259	81	13	454
Stove-pipe shelf and utensil-stand .....	G. McAdams .....	199,919	Feb. 5, 1878	34	10	13	238
Stove-pipe thimble .....	H. Dixon and F. W. Unverferth .....	199,423	Jan. 22, 1878	734	216	13	138
Stove-pipe thimble .....	P. Mihan .....	203,478	May 7, 1878	256	74	13	855
Stove-pipe ventilator .....	E. P. Corby .....	199,620	Jan. 29, 1878	965	280	13	183
Stove-pipe ventilator .....	T. R. Way .....	205,985	July 16, 1878	591	170	14	92
Stove-pipe ventilator, Automatic .....	E. P. Corby .....	199,619	Jan. 29, 1878	964	280	13	182
Stove-pipes, Water-heater for .....	J. Dunreith and S. Crawford .....	207,855	Sept. 10, 1878	291	89	14	389
Stove-plate, Ornamental .....	F. P. Nicholson .....	208,842	Oct. 8, 1878	423	122	14	553
Stove-polish .....	H. J. Dreher .....	206,868	Aug. 13, 1878	231	.....	14	229
Stove-polish liquid .....	G. G. Briggs .....	199,407	Jan. 22, 1878	720	.....	13	136
Stove-polishing composition .....	S. T. Smith .....	205,694	July 2, 1878	249	.....	14	40
Stove-polishing compound .....	H. S. Ziegler .....	203,309	May 7, 1878	80	.....	13	831
Stove, Safety .....	C. J. Smith .....	200,771	Feb. 26, 1878	919	270	13	397
Stove, Self-extinguishing .....	W. F. Condon .....	200,697	Feb. 26, 1878	848	{ 249 250 }	13	386
Stove, Self-extinguishing .....	W. F. Condon .....	210,918	Dec. 17, 1878	603	167	14	919
Stove, Self-extinguishing car .....	F. S. Bissell .....	205,467	July 2, 1878	5	2	14	9
Stove-shelf .....	E. Bussey .....	200,974	Mar. 5, 1878	151	49	13	439
Stove-shelf .....	G. W. Robertson .....	203,944	May 21, 1878	764	220	13	937
Stove-shelf and heating-drum .....	W. T. Bowen .....	204,475	June 4, 1878	57	18	13	1620
Stove shelf attachment, Cooking .....	G. Haynor .....	207,807	Sept. 10, 1878	237	75	14	382
Stove shelf, Cooking .....	W. J. Copp .....	207,798	Sept. 10, 1878	230	72	14	381
Stove shelf, Cooking .....	W. A. King .....	199,555	Jan. 22, 1878	869	254	13	160
Stove turn-table .....	J. T. Peet .....	206,479	July 30, 1878	1174	336	14	173
Stove, Wood heating .....	S. S. Jewett .....	199,446	Jan. 22, 1878	754	221	13	142
Stoves and furnaces, Dumping-grate for .....	A. J. Redway .....	210,804	Dec. 10, 1878	453	128	14	892
Stoves and ranges, Reversible center-piece for .....	J. Dutot and W. H. Thrift .....	199,275	Jan. 15, 1878	578	169	13	106
Stoves, Attachment to kerosene .....	A. Freeman .....	199,531	Jan. 22, 1878	848	248	13	156
Stoves, Automatic ash-guard for .....	C. A. Hamlin .....	206,440	July 30, 1878	1132	325	14	168
Stoves, Blast apparatus for .....	J. Waldron .....	208,501	Oct. 1, 1878	47	15	14	495
Stoves, Boiler attachment for .....	J. M. Killin .....	207,286	Aug. 20, 1878	666	197	14	297
Stoves, Cooking attachment to coal-oil .....	A. H. Underwood .....	199,671	Jan. 29, 1878	1016	296	13	190
Stoves, Door for cooking .....	B. F. Clement .....	200,694	Feb. 26, 1878	751	220	13	372
Stoves, &c., Draft apparatus for .....	J. B. Andrews .....	199,396	Jan. 22, 1878	711	209	13	134
Stoves, Draft-deflecting plate in cooking .....	T. B. Way .....	210,440	Dec. 3, 1878	52	13	14	831
Stoves, Fire-plate for .....	H. L. McAvoy .....	199,844	Jan. 29, 1878	1179	346	13	971
Stoves, Fire-pot lining for cook .....	R. J. King .....	204,155	May 28, 1878	1015	288	13	215
Stoves, Foot bar and rail for .....	J. Jewett .....	209,053	Oct. 15, 1878	665	191	14	588
Stoves, Grate for cooking and heating .....	P. Symons .....	198,823	Jan. 1, 1878	101	29	13	24
Stoves, Hearth for cooking .....	C. Rochl .....	204,453	June 4, 1878	36	12	13	1018
Stoves, Heat-fender for cooking .....	B. S. Hite .....	206,947	Aug. 13, 1878	312	95	14	248
Stoves, Hood for cooking .....	S. Cromer .....	208,891	Oct. 15, 1878	480	138	14	564
Stoves, Long center for .....	W. Devore and S. L. Yourtee .....	203,713	May 14, 1878	514	146	13	897
Stoves, Revolving-grate for cooking .....	W. Smith .....	199,870	Jan. 29, 1878	1201	352	13	219
Stoves, "Smoke-convey" for cooking .....	E. A. G. Roulstone .....	210,967	Dec. 17, 1878	659	181	14	925
Stoves, Valve for regenerating hot-blast .....	J. M. Hartman .....	206,173	July 23, 1878	809	231	14	122
Stoves, Ventilator attachment for cook .....	J. Harding .....	204,819	June 11, 1878	414	122	13	1071
Strainer for faucets and water-pipes .....	A. H. Willoughby .....	200,496	Feb. 19, 1878	623	183	13	345
Strainer for milk-pails, Adjustable .....	M. Campbell .....	200,976	Mar. 5, 1878	152	50	13	439
Strainer, Gravy .....	J. Scheider .....	198,999	Jan. 8, 1878	291	85	13	61
Strainer, Milk .....	H. More .....	203,847	May 21, 1878	666	189	13	923
Strainer, Milk .....	J. D. Sechler .....	198,905	Jan. 1, 1878	199	53, 54	13	38
Strainer, Pulp .....	G. Campbell and W. Lidgett .....	209,326	Oct. 29, 1878	967	282	14	688
Strap: .....	.....	.....	.....	.....	.....	.....	.....
See Harness-strap. Suspender-strap. Shawl-strap. .....	.....	.....	.....	.....	.....	.....	.....
Strap holder, Leather .....	D. A. Johnson .....	200,918	Mar. 5, 1878	98	33	13	430
Straw and feed cutter .....	D. K. Burkholder .....	208,460	Oct. 1, 1878	8	2	14	489



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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Straw-burning furnace .....	C. I. Hall .....	203,267	May 7, 1878	33	10	13	825
Straw-cutter .....	J. Baron .....	199,893	Feb. 5, 1878	3	1	13	233
Straw-cutter .....	C. Brustman .....	206,224	July 23, 1878	865	247	14	130
Straw-cutter .....	W. V. and D. J. Devault .....	199,808	Jan. 29, 1878	1145	336	13	210
Straw-cutter .....	J. S. and J. Matthews .....	207,757	Sept. 3, 1878	177	54	14	371
Straw-cutter .....	G. R. Pierpont .....	202,751	Apr. 23, 1878	980	281	13	747
Straw-cutter .....	W. A. Rife .....	209,515	Oct. 29, 1878	1166	339	14	667
Straw-cutter .....	G. Schmidt .....	209,523	Oct. 29, 1878	1175	341	14	668
Strawberry-protector .....	T. Delany .....	205,252	June 25, 1878	893	264	13	1142
Strawberry-vine cutter .....	G. Kingsland .....	202,951	Apr. 30, 1878	1201	347	13	779
Street-receiver and stench-trap .....	J. Gisel .....	200,277	Feb. 12, 1878	395	117	13	302
Street-sprinklers, Inlet-pipe for .....	G. H. Stallman .....	204,172	May 28, 1878	1031	294	13	974
Street-sweeper .....	C. W. Cunningham .....	210,674	Dec. 10, 1878	321	87	14	874
Street-sweeping machine .....	H. W. Richardson .....	203,942	May 21, 1878	762	220	13	936
Stretcher and wheeled frame .....	D. Rice and G. K. Childs .....	202,868	Apr. 23, 1878	1105	317	13	763
String-holder .....	B. Elliott .....	207,857	Sept. 10, 1878	293	90	14	389
Stud for frames and fender-bars .....	W. T. Mersereau .....	203,551	May 14, 1878	355	100	13	877
Stud, Shirt and sleeve .....	N. Salmon and A. Delavière .....	204,095	May 21, 1878	930	266	13	957
Stuffing-box and packing for valve-stems .....	C. Deava and W. S. Brazier .....	209,160	Oct. 25, 1878	794	230	14	611
Stuffing-box, Steam-engine .....	C. C. Jerome .....	200,458	Feb. 19, 1878	586	173	13	539
Stuffing-box, Steam-engine .....	C. C. Jerome .....	200,459	Feb. 19, 1878	587	173	13	539
Stuffing-box, Steam-engine .....	H. S. Ross .....	206,139	July 16, 1878	751	216	14	112
Stuffing-box, Steam-engine double .....	T. Northey .....	203,553	May 14, 1878	356	101	13	877
Stamp-burner .....	D. Bates .....	205,465	July 2, 1878	3	1	14	9
Stamp-extracting machine .....	A. M. Michael .....	207,541	Aug. 27, 1878	949	278	14	337
Stamp-extractor .....	A. J. Alley .....	207,381	Aug. 27, 1878	775	231	14	316
Stamp-extractor .....	J. M. Dillon .....	209,752	Nov. 12, 1878	240	73	14	718
Stamp-extractor .....	W. K. Fuller .....	201,514	Mar. 19, 1878	724	220	13	535
Stamp-extractor .....	C. Haines .....	202,107	Apr. 9, 1878	266	78	13	641
Stamp-extractor .....	I. M. Noyes .....	206,352	July 23, 1878	1019	291	14	150
Stamp-extractor .....	B. F. Price .....	201,828	Mar. 26, 1878	1053	322	13	586
Stamp-extractor .....	L. O. Sailor .....	198,817	Jan. 1, 1878	97	27	13	23
Stamp-extractor .....	J. C. Sharp .....	206,837	Aug. 6, 1878	183	58, 59	14	229
Stamp-extractor .....	J. D. Smith .....	204,627	June 4, 1878	205	65, 66	13	1041
Stamp-puller .....	J. A. Jeffers .....	207,282	Aug. 20, 1878	662	196	14	296
Stamp-puller .....	J. D. Smith .....	201,297	Mar. 12, 1878	489	150	13	494
Stamp-puller .....	W. A. Webb .....	208,999	Oct. 15, 1878	597	174	14	530
Submarine rock-drilling platform .....	T. Cumming .....	202,415	Apr. 16, 1878	598	176	13	691
Sucker-rod socket or drill-grab .....	R. Briney .....	201,386	Mar. 19, 1878	597	183	13	516
Sugar, Apparatus for refining raw .....	G. A. Jasper .....	198,944	Jan. 8, 1878	235	67	13	51
Sugar, Apparatus for the manufacture of hard .....	J. O. Donner .....	209,029	Oct. 15, 1878	633	183	14	584
Sugar, Centrifugal machine for purifying and refining .....	H. W. Walker and T. L. Patterson .....	209,309	Oct. 22, 1878	937	273 } 274 }	14	631
Sugar, Machinery for making cube .....	W. Jasper .....	208,522	Oct. 1, 1878	66	20	14	498
Sugar machines, Hopper for cube .....	W. Jasper and S. Boushey .....	208,521	Oct. 1, 1878	65	20	14	498
Sugar, Manufacturing coffee .....	F. O. Matthiessen .....	201,809	Mar. 26, 1878	1035	.....	13	583
Sugar-mixing apparatus .....	D. Edwards .....	210,769	Dec. 10, 1878	418	116	14	887
Sugar-pressing machine .....	A. De La Montagnie .....	201,229	Mar. 12, 1878	412	126 } 127 }	13	483
Sugar, Refining raw .....	G. A. Jasper .....	198,943	Jan. 8, 1878	234	66	13	51
Sugar-train .....	D. Pray .....	208,693	Oct. 8, 1878	256	73	14	531
Sugar, Treating beet-roots for the manufacture of .....	F. N. Frezon and L. R. D'Oliveira .....	207,271	Aug. 20, 1878	652	.....	14	295
Suit, Child's kilt .....	I. Crane .....	205,176	June 25, 1878	814	242	13	1132
Sulky .....	T. H. Brown .....	209,109	Oct. 22, 1878	739	214	14	604
Sulky .....	D. Bushor .....	207,711	Sept. 3, 1878	127	39	14	365
Sulky .....	J. F. Pray .....	199,104	Jan. 8, 1878	388	116	13	77
Sulky-cushion .....	T. H. Brown .....	202,925	Apr. 30, 1878	1177	339	13	776
Sulky, Trotting .....	W. J. Hamill .....	210,687	Dec. 10, 1878	333	91	14	876
Sulky, Trotting .....	H. B. Paul .....	206,606	July 30, 1878	1308	376	14	189
Sulphur, Apparatus for refining .....	H. H. Eames .....	204,206	May 28, 1878	1073	306	13	979
Sulphur from its ores, Separating .....	R. G. Leckie .....	202,443	Apr. 16, 1878	630	184	13	696
Sun-dial .....	J. W. Holmes .....	205,485	July 2, 1878	21	7	14	11
Supporter:							
See Anchor-fluke supporter. Shaft-supporter.							
Book-supporter .....							
Boot and shoe counter. Sleeve-supporter.							
Supporter. Spooling-machine-bob-							
Cigar-supporter. bin supporter.							
Drawer-supporter. Stocking-supporter.							
Garment-supporter. Table-leaf supporter.							
Hammock-supporter. Thill-supporter.							
Heel-supporter. Tongue-supporter.							
Hose-nozzle supporter. Umbrella-supporter.							
Napkin-supporter. Vehicle-spring sup-							
Obstetrical supporter. porter.							
Suppository .....	F. D. Owen .....	199,221	Jan. 15, 1878	524	.....	13	98
Surgical dilator .....	W. I. Alvord .....	207,932	Sept. 10, 1878	377	114	14	400
Surgical explorer .....	C. R. Jennison .....	206,243	July 23, 1878	887	253	14	133
Surgical operating-table .....	T. McIlroy .....	201,933	Apr. 2, 1878	73	20	13	609
Surgical tube, India-rubber .....	R. Lockwood .....	204,905	June 18, 1878	529	154	13	1089
Surveying-instruments, Spindle attachment for .....	F. E. Brandis .....	201,155	Mar. 12, 1878	340	105	13	473
Surveying-instruments, Tripod for .....	W. Gurley .....	205,481	July 2, 1878	18	6	14	11
Surveying-instruments, Tripod-head for .....	W. Gurley .....	208,732	Oct. 8, 1878	294	85	14	536
Surveying-instruments, Tripod-head for .....	W. Gurley .....	209,255	Oct. 22, 1878	884	257	14	624
Surveying-instruments, Tripod-head for .....	W. Gurley .....	209,562	Nov. 5, 1878	28	8, 9	14	684
Surveyor's transit, Centering device for .....	A. Young .....	202,916	Apr. 23, 1878	1152	331	13	768
Suspender-clasp .....	W. L. F. Martens .....	200,836	Mar. 5, 1878	23	8	13	418
Suspender-clasp .....	J. W. Smith .....	201,458	Mar. 19, 1878	669	204	13	526
Suspender-end .....	B. J. Greely .....	209,559	Nov. 5, 1878	23	7	14	684
Suspender-ends and other articles, Securing loops and studs to .....	E. Painter .....	204,165	May 28, 1878	1026	292	13	973
Suspender-socket .....	J. P. Lindsay .....	210,792	Dec. 10, 1878	440	123	14	890
Suspender-strap .....	C. J. Lauderbach .....	201,428	Mar. 19, 1878	641	195	13	522
Suspenders .....	L. Netzer .....	199,659	Jan. 23, 1878	1004	291	13	189
	B. J. Greely .....	206,013	July 16, 1878	617	177	14	96

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Suspenders .....	H. Knoph .....	207, 531	Aug. 27, 1878	938	276	14	336
Suspension-bracket, Adjustable .....	J. C. Lake .....	210, 697	Dec. 10, 1878	340	93	14	877
Suspension-hook .....	F. Anderson .....	204, 875	June 18, 1878	498	145	13	1085
Suspensory bandage .....	C. F. Hill .....	208, 240	Sept. 24, 1878	726	213	14	453
Suspensory bandage .....	S. E. G. Rawson .....	204, 088	May 21, 1878	922	263	13	956
Sweeping-machine .....	I. A. Chomel .....	209, 379	Oct. 29, 1878	1024	298	14	646
Swill, Machine for condensing .....	J. T. Noye .....	205, 758	July 9, 1878	332	97	14	54
Swine, Ring-blank for .....	W. D. Brown .....	205, 996	July 16, 1878	601	173	14	94
Swine-ringing instrument .....	W. D. Brown .....	206, 419	July 30, 1878	1110	317	14	165
Swing .....	D. B. Hubbard .....	203, 049	Apr. 30, 1878	1295	375	13	791
Swing .....	L. D. Noble .....	209, 623	Nov. 5, 1878	94	28	14	693
Swing .....	W. S. Tothill .....	206, 406	July 30, 1878	1097	313	14	163
Swing-stile recorder .....	V. I. Feeny .....	208, 727	Oct. 8, 1878	289	83	14	535
Switch:							
See Annunciator-alarm switch.	Railway-switch.						
Telephone-switch.							
Switch-chair .....	J. C. Eggleston .....	207, 408	Aug. 27, 1878	804	238	14	320
Switch-cords, Tip for .....	T. B. Doolittle .....	208, 969	Oct. 15, 1878	568	165	14	576
Switch-head chair .....	G. W. Rawson .....	206, 612	July 30, 1878	1312	377	14	190
Switch-head chair .....	G. S. Winslow .....	201, 213	Mar. 12, 1878	393	131	13	481
Switch-signal .....	D. Rousseau .....	199, 107	Jan. 8, 1878	391	117	13	78
Switch-signaling apparatus .....	D. Rousseau .....	209, 423	Oct. 29, 1878	1065	310	14	652
Switches, Brace and plate for point .....	J. T. Richardson .....	202, 286	Apr. 9, 1878	453	132	13	667
Switch-hook .....	A. Wallach .....	202, 898	Apr. 23, 1878	1137	326	13	766
Swivel-joint .....	A. Work .....	203, 307	May 7, 1878	78	23	14	839
Syringe .....	E. N. Bliss and J. Davol .....	208, 032	Sept. 17, 1878	524	157	14	424
Syringe .....	S. Peters .....	201, 628	Mar. 26, 1878	890	262	13	557
Syringe .....	S. Peters .....	204, 912	June 18, 1878	536	156	13	1690
Syringe .....	W. T. Keaser .....	209, 292	Oct. 22, 1878	921	269	14	629
Syringe .....	B. F. Sutton .....	199, 479	Jan. 22, 1878	788	231	13	147
Syringe apparatus .....	C. Wood .....	206, 653	July 30, 1878	1357	390	14	185
Syringe, Enema .....	M. Mattson .....	199, 843	Jan. 29, 1878	1177	346	13	215
Syringe, Hypodermic .....	T. S. Parker .....	201, 443	Mar. 19, 1878	653	199	13	524
Syringe or liquid-dropper .....	W. W. Stewart .....	208, 273	Sept. 24, 1878	786	224	14	458
Syringe, Vaginal .....	H. T. Chamberlin .....	205, 553	June 25, 1878	1004	297	13	1156
Syringes, Cap for glass .....	E. Hagerty .....	200, 909	Mar. 5, 1878	91	31	13	429
T.							
Table:							
See Billiard-table.	Self-waiting table.						
Dining and laundry table.	Sewing-machine table.						
Folding table.	Sewing-machine turn-table.						
Game-table.	Steaming-table.						
Heating-table.	Stove turn-table.						
Ironing-table.	Surgical operating-table.						
Kitchen-table.	Tailor's table.						
Library-table.							
Railway turn-table.							
Table .....	M. E. Converse .....	210, 187	Nov. 26, 1878	733	218	14	790
Table .....	H. O. Hall and H. J. Durgin .....	206, 234	July 23, 1878	875	250	14	132
Table .....	N. A. Hull .....	208, 318	Sept. 24, 1878	810	236	14	464
Table .....	C. Kade .....	205, 893	June 25, 1878	1045	310	13	1162
Table .....	J. C. Melcher .....	210, 138	Nov. 19, 1878	665	198	14	777
Table .....	P. Pleines .....	208, 632	Oct. 1, 1878	178	52	14	513
Table .....	S. Robbins .....	204, 377	May 28, 1878	1245	354	13	1001
Table and clothes-horse combined .....	D. M. Singer .....	199, 585	Jan. 22, 1878	901	263	13	165
Table and life-preserver, Combined .....	H. M. Green .....	208, 473	Oct. 1, 1878	20	6	14	491
Table-leaf support .....	W. F. Daly .....	209, 235	Oct. 22, 1878	867	252	14	621
Table-leaf support .....	E. Flather and W. Houghtaling .....	199, 150	Jan. 15, 1878	457	134	13	87
Table-leaf support .....	G. T. Wallace .....	200, 954	Mar. 5, 1878	130	43	13	456
Tablet-blotter .....	C. M. Cott .....	207, 017	Aug. 13, 1878	378	116	14	256
Tablet-blotter .....	M. Harris, C. E. and N. W. Meade .....	206, 725	Aug. 6, 1878	69	22	14	215
Tablet, Case for writing .....	W. E. O'Bryon .....	209, 417	Oct. 29, 1878	1062	308	14	652
Tablet-holder, Erasive .....	O. Cleveland .....	203, 120	Apr. 30, 1878	1360	396	13	890
Tablet, Writing .....	W. O. Davis .....	204, 138	May 28, 1878	904	283	13	999
Tablet, Writing .....	W. O. Davis .....	209, 966	Oct. 15, 1878	564	165	14	575
Tablet, Writing .....	W. E. O'Bryon .....	208, 488	Oct. 1, 1878	33	10	14	493
Tablets, Cover for holding .....	H. Willson .....	204, 118	May 21, 1878	951	273	13	960
Tachometer or speed-indicator .....	E. Buss .....	201, 495	Mar. 19, 1878	704	215	13	532
Tack-driver .....	P. S. Felter .....	210, 511	Dec. 3, 1878	130	34	14	840
Tacks, Machine for cleaning and sifting .....	H. H. Heald .....	207, 178	Aug. 20, 1878	553	166	14	282
Tacks, Machine for making lasting .....	T. B. Cox .....	199, 416	Jan. 22, 1878	728	214	13	137
Tacking-machine .....	J. W. Carver .....	207, 851	Sept. 10, 1878	285	87, 88	14	288
Tackle-block .....	J. L. Pope .....	207, 548	Aug. 27, 1878	957	280	14	338
Tag-holder .....	R. McMurry and W. H. Goods .....	209, 769	Nov. 12, 1878	263	78	14	739
Tags, pamphlets, &c., Punching, knotting, and stringing machine for .....	J. Winter .....	206, 758	Aug. 6, 1878	100	32	14	219
Tailor's-chalk sharpener .....	J. Butcher .....	208, 955	Oct. 15, 1878	555	162	14	574
Tailor's grinding-machine .....	A. Jelinek .....	199, 647	Jan. 29, 1878	994	289	13	187
Tailor's table .....	A. Warth .....	207, 575	Aug. 27, 1878	992	290 } 291 }	14	343
Tallow, Manufacture of artificial .....	M. De la Vega .....	209, 203	Oct. 22, 1878	840		14	617
Tally, Grain .....	W. N. Phipps .....	206, 480	July 30, 1878	1175	337	14	173
Tallying-machine .....	W. N. Durant .....	200, 267	Feb. 12, 1878	386	114	13	301
Tan-vats, Machine for raising leather from .....	A. Whiting and J. A. Smith .....	205, 696	July 2, 1878	135	41	14	26
Tanning and other purposes, Construction of cement vats for .....	W. A. Gay .....	209, 757	Nov. 12, 1878	250	74	14	719
Tanning compound .....	C. J. Tinnerholm .....	200, 108	Feb. 5, 1878	219		13	267
Tanning leather .....	G. Goodwin .....	199, 054	Jan. 8, 1878	342		13	69
Tank:							
See Car-tank.	Service-tank.						
Oil-tank.	Storing-tank.						
Petroleum-tank.							
Tap and faucet, Combined .....	M. A. Farrell .....	201, 172	Mar. 12, 1878	354	109	13	475



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Tap, Barrel .....	R. H. Byrne and E. D. Knight .....	203, 706	May 14, 1878	505	143	13	896
Tap, Champagne .....	W. and R. Bentley .....	203, 314	May 7, 1878	86	25	13	831
Tap for casks, Safety .....	I. Conradt .....	201, 870	Apr. 2, 1878	13	4	13	600
Tap with turnable outlet .....	C. G. Fischer .....	200, 383	Feb. 19, 1878	515	152	13	328
Tap-wrench .....	C. H. Fowler .....	207, 172	Aug. 20, 1878	546	164	14	281
Tapping mains, Machine for .....	J. Penny .....	210, 706	Dec. 10, 1878	349	96	14	878
Tape-holder .....	E. Rice .....	201, 835	Mar. 26, 1878	1063	324	13	587
Tar-package .....	C. H. Leggett .....	207, 045	Aug. 13, 1878	402	125	14	260
Target .....	E. B. Beer .....	200, 426	Feb. 19, 1878	557	164	13	335
Target .....	J. Göbbels .....	202, 255	Apr. 9, 1878	421	123	13	662
Target .....	W. Kuhn .....	208, 910	Oct. 15, 1878	501	145	14	567
Target, Ball .....	C. V. Boughton .....	209, 155	Oct. 22, 1878	790	229	14	610
Target, Ball .....	H. P. Fletcher .....	206, 716	Aug. 6, 1878	60	19	14	214
Target, Ball .....	A. C. Johnson .....	210, 856	Dec. 17, 1878	517	146	14	909
Target, Ball .....	C. A. Tatum .....	206, 983	Aug. 13, 1878	345	106	14	252
Target, Ball .....	N. F. Turner .....	205, 220	June 25, 1878	862	255	13	1138
Target, Spherical .....	S. A. Darrach .....	204, 300	May 28, 1878	1166	332	13	991
Target thrower, Ball .....	A. A. Call .....	207, 389	Aug. 27, 1878	782	233	14	317
Target thrower, Ball .....	M. E. Card .....	203, 416	May 7, 1878	188	54	13	846
Target thrower, Ball .....	J. G. Mole .....	201, 118	Mar. 12, 1878	305	93	13	468
Target thrower, Ball .....	P. Taltavull .....	202, 301	Apr. 9, 1878	407	137	13	669
Tassel .....	W. Offner .....	204, 073	May 21, 1878	904	259	13	954
Tea and coffee pot knob .....	W. B. Choate .....	204, 198	May 28, 1878	1066	303	13	978
Tea and coffee pots of enameled iron ware, Handle for .....	F. G. and W. F. Niedringhaus .....	209, 132	Oct. 22, 1878	708	223	14	607
Tea-case .....	J. A. Anderson .....	203, 870	May 21, 1878	687	195	13	926
Tea, coffee, &c., Apparatus for making .....	J. Miller .....	201, 272	Mar. 12, 1878	459	141	13	490
Tea, coffee, &c., Device for making .....	J. Miller .....	203, 179	Apr. 30, 1878	1428	417	13	809
Tea-kettle .....	N. A. Menaar and H. Sangster .....	201, 034	Mar. 5, 1878	215	67	13	448
Tea-pots, Tilter for .....	J. A. Bragan .....	209, 545	Nov. 5, 1878	7	3	14	682
Teaching history, &c., Apparatus for .....	N. Lovrin .....	198, 749	Jan. 1, 1878	20	5	13	11
Teaching involution and evolution, Device for .....	J. R. Davis .....	209, 385	Oct. 29, 1878	1029	299	14	647
Teaching music, Device for .....	C. M. Stauffer .....	203, 210	Apr. 30, 1878	1462	427	13	813
Teaching swimming, Apparatus for .....	T. H. Monstery .....	206, 892	Aug. 13, 1878	263	80	14	242
Teeth, Artificial .....	W. P. Hall .....	200, 284	Feb. 12, 1878	400	119	13	303
Teeth, Metallic filling for .....	N. B. Slayton .....	201, 895	Apr. 2, 1878	36	.....	13	604
Teeth on aluminium plates, Securing artificial .....	J. T. Thornton .....	198, 908	Jan. 1, 1878	193	54	13	58
Telegraph, Acoustic .....	T. A. Edison .....	200, 993	Mar. 5, 1878	171	55	13	441
Telegraph box, Fire and district alarm .....	J. J. Bradley .....	204, 708	June 11, 1878	293	91	13	1057
Telegraph cable, Submarine .....	W. T. Henley .....	203, 619	May 14, 1878	413	118	13	885
Telegraph, District and alarm .....	A. W. Gray .....	206, 782	Aug. 6, 1878	128	40, 41	14	222
Telegraph, Duplex .....	T. A. Edison .....	207, 723	Sept. 3, 1878	142	43	14	367
Telegraph, Duplex .....	T. A. Edison .....	207, 724	Sept. 3, 1878	142	43	14	367
Telegraph, Duplex .....	G. Smith .....	199, 869	Jan. 29, 1878	1198	352	13	218
Telegraph, Duplex .....	F. A. Gower and M. J. Matthews .....	202, 539	Apr. 16, 1878	739	214	13	709
Telegraph, Electro-harmonic .....	L. Birge and C. D. Williams .....	209, 645	Nov. 5, 1878	119	35, 36	14	697
Telegraph, Fire-alarm .....	J. O. Fowler, jr .....	207, 509	Aug. 27, 1878	909	268 269	14	332
Telegraph-key .....	H. E. Blake .....	201, 089	Mar. 12, 1878	272	84	13	464
Telegraph perforator and transmitter, Automatic .....	T. A. Edison .....	200, 994	Mar. 5, 1878	173	55	13	441
Telegraph-pole .....	W. O. Lewis .....	203, 746	May 14, 1878	548	155	13	901
Telegraph-pole .....	E. D. Withers .....	208, 064	Sept. 10, 1878	453	136	14	410
Telegraph, Printing .....	G. L. Anders .....	210, 890	Dec. 17, 1878	562	157	14	914
Telegraph, Printing .....	G. L. Anders .....	210, 891	Dec. 17, 1878	564	158	14	914
Telegraph, Printing .....	G. L. Anders .....	210, 892	Dec. 17, 1878	566	158	14	914
Telegraph, Printing .....	G. L. Anders .....	210, 893	Dec. 17, 1878	569	158	14	914
Telegraph, Printing .....	G. L. Anders .....	210, 894	Dec. 17, 1878	571	159	14	915
Telegraph, Printing .....	G. L. Anders .....	210, 895	Dec. 17, 1878	574	159	14	915
Telegraph, Printing .....	G. L. Anders .....	210, 896	Dec. 17, 1878	575	159 160	14	915
Telegraph, Printing .....	G. M. Phelps .....	208, 537	Oct. 1, 1878	82	24	14	500
Telegraph, Printing .....	H. Van Hoovenbergh .....	204, 516	June 4, 1878	88	30	13	1025
Telegraph-relay .....	G. Allan and J. W. Brown .....	200, 680	Feb. 26, 1878	892	245	13	384
Telegraph-repeater .....	F. Catlin .....	204, 132	May 28, 1878	988	281	13	968
Telegraph repeater, Quadruplex .....	T. A. Edison .....	209, 241	Oct. 22, 1878	872	253	14	622
Telegraph, Speaking .....	T. A. Edison .....	203, 013	Apr. 30, 1878	1260	365	13	787
Telegraph, Speaking .....	T. A. Edison .....	203, 014	Apr. 30, 1878	1262	365 366	13	787
Telegraph, Speaking .....	T. A. Edison .....	203, 015	Apr. 30, 1878	1263	366	13	787
Telegraph stock-reporters, Paper-carrier for .....	T. S. McDowell .....	203, 035	May 14, 1878	429	123	13	886
Telegraph, Underground .....	J. B. Hyde .....	202, 442	Apr. 16, 1878	629	184	13	696
Telegraph-wire, Compound for coating .....	F. Field and R. Telling .....	207, 800	Sept. 10, 1878	294	.....	14	390
Telegraph-wire, Insulated .....	M. H. Alberger .....	201, 477	Mar. 19, 1878	666	210	13	529
Telegraph-wires, Coupling for .....	A. R. Lane .....	202, 556	Apr. 16, 1878	758	219	13	711
Telegraphs, Circuit for acoustic or telephonic .....	T. A. Edison .....	203, 019	Apr. 30, 1878	1268	367	13	788
Telegraphs, Condensing resistance for electric .....	J. Muirhead, jr .....	208, 065	Oct. 1, 1878	215	61	14	517
Telegraphs, Transmitter for printing .....	G. L. Anders .....	210, 897	Dec. 17, 1878	579	160	14	916
Telegraphs, Synchronous movement for electric .....	T. A. Edison .....	200, 032	Feb. 5, 1878	136	45	13	254
Telegraphic accumulator and condenser .....	H. A. Taylor and A. Muirhead .....	206, 366	July 23, 1878	1036	297	14	151
Telegraphic and other lines, Isochronous and synchronous movement for .....	P. La Cour .....	203, 423	May 7, 1878	195	56, 57	13	847
Telegraphic fire-alarm apparatus .....	A. C. and A. H. Palmer .....	201, 941	Apr. 2, 1878	79	22	13	610
Telegraphy, Morse telephonic .....	E. Gray .....	193, 738	Jan. 1, 1878	7	2	13	10
Telephone .....	E. Berliner .....	193, 141	Jan. 15, 1878	447	132	13	85
Telephone .....	A. M. Dolbear .....	199, 041	Jan. 8, 1878	328	96	13	67
Telephone .....	J. E. Smith .....	201, 000	Mar. 5, 1878	239	76	13	451
Telephone .....	J. Trowbridge .....	200, 031	Feb. 26, 1878	774	228	13	376
Telephone .....	T. A. Watson .....	199, 007	Jan. 8, 1878	298	87	13	62
Telephone, Acoustic .....	J. R. Holcomb .....	205, 864	July 9, 1878	445	126	14	69
Telephone alarm-bells, Indicator for .....	C. W. Jones .....	203, 738	May 14, 1878	538	152	13	900
Telephone, Automatic switch or cut-out for .....	T. A. Watson .....	209, 592	Nov. 5, 1878	58	17	14	688
Telephone call-signal .....	T. A. Edison .....	203, 017	Apr. 30, 1878	1263	366	13	787
Telephone call-signal .....	S. E. Rusk .....	205, 580	July 2, 1878	123	37	14	25
Telephone call-signal apparatus .....	T. A. Watson .....	202, 495	Apr. 16, 1878	475	198	13	703

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Telephone, Mechanical.....	S. S. Parsons, F. R. Shaw, and G. N. Daniels.	207,436	Aug. 27, 1878	831	246	14	323
Telephone or speaking-telegraph.....	T. A. Edison.	203,018	Apr. 30, 1878	1267	367	13	787
Telephone-resonator.....	C. E. Carmon.	207,011	Aug. 13, 1878	372	114	14	256
Telephone, Speaking.....	A. G. Bell.	201,488	Mar. 19, 1878	697	213	13	531
Telephone, Speaking.....	T. A. Edison.	203,016	Apr. 30, 1878	1265	366	13	787
Telephone, Speaking.....	T. A. Edison.	208,299	Sept. 24, 1878	791	231	14	461
Telephone, Speaking.....	E. Gray.	204,027	May 21, 1878	860	246	13	948
Telephone, Speaking.....	E. Gray.	204,029	May 21, 1878	863	246	13	948
Telephone, Speaking.....	E. Gray.	204,559	June 4, 1878	127	43	13	1031
Telephone, Speaking.....	E. Gray.	204,560	June 4, 1878	128	43	13	1031
Telephone, Speaking.....	E. Gray.	207,269	Aug. 20, 1878	649	193	14	294
Telephone, Speaking.....	E. Gray.	210,776	Dec. 10, 1878	424	118	14	888
Telephone, Speaking.....	W. Gillett.	204,024	May 21, 1878	857	245	13	948
Telephone, Speaking.....	J. H. Irwin.	206,241	July 23, 1878	885	252	14	133
Telephone, Speaking.....	G. M. Phelps.	209,289	Oct. 22, 1878	918	268	14	623
Telephone-switch.....	C. A. Cheever.	208,463	Oct. 1, 1878	11	3	14	490
Telephone systems, Switch for district.....	T. B. Doolittle.	209,115	Oct. 22, 1878	747	217	14	605
Telephone-transmitter.....	J. H. Irwin.	199,266	Oct. 22, 1878	897	261	14	625
Telephone transmitter, Speaking.....	G. B. Richmond.	202,870	Apr. 23, 1878	1107	317	13	763
Telephones and phonographs, Diaphragm for.....	R. Eickemeyer.	210,929	Dec. 17, 1878	614	171	14	920
Telephones, Circuit for speaking.....	E. Gray.	203,264	May 7, 1878	28	9	13	824
Telephonic conductor.....	E. F. Phillips.	206,821	Aug. 6, 1878	165	52	14	227
Telescope attachment for surveyors' compasses.....	W. and L. E. Gurley.	205,742	July 9, 1878	314	92	14	72
Tellurian.....	M. Mac Vicar.	205,111	June 18, 1878	731	217	13	1116
Tellurian.....	J. Schedler.	202,590	Apr. 16, 1878	792	228	13	715
Temperature of apartments, Device for indicating and automatically regulating the.....	E. Armstrong.	200,497	Feb. 19, 1878	624	184	13	345
Tempering, lubricating, &c., Composition for.....	J. Park.	204,076	May 21, 1878	908		13	955
Tenoning-machine.....	M. J. Mullins.	206,121	July 16, 1878	732	210	14	110
Tension, Device for indicating the yielding of a rod or bar under.....	C. Huston.	209,893	Nov. 12, 1878	388	211	14	737
Tension-wheel.....	O. O. Storle.	209,144	Oct. 22, 1878	780	226	14	609
Tent.....	A. S. Burt.	210,005	Nov. 19, 1878	526	158	14	758
Tent, awning, &c.....	M. R. Kunkely.	203,279	May 7, 1878	43	13	13	826
Tent-pin, Metallic.....	A. S. Daggett.	204,425	June 4, 1878	11	4	13	1014
Tent-pole.....	H. C. Cushing.	208,158	Sept. 17, 1878	628	185	14	438
Terret, Harness.....	C. B. Bristol.	200,166	Feb. 12, 1878	286	85	13	285
Terret, Harness.....	C. L. Pond.	200,476	Feb. 19, 1878	606	178	13	342
Testing-machine.....	F. Fairbanks.	210,107	Nov. 19, 1878	632	187	14	772
Testing-machine.....	F. S. Kinney.	204,901	June 18, 1878	525	153	13	1088
Testing machine, Metal.....	J. R. Grout.	210,252	Nov. 26, 1878	798	237	14	799
Testing the quality of rolling-stock, &c., Machine for.....	S. Elek.	199,046	Jan. 8, 1878	333	98	13	68
Tether.....	W. B. Mathews.	200,620	Feb. 26, 1878	765	225	13	374
Tether.....	R. Warlow.	209,783	Nov. 12, 1878	275	82	14	722
Textile fabrics, Apparatus for cleansing and bleaching.....	H. S. Robinson.	205,140	June 18, 1878	762	225	13	1129
Textile fabrics, Compound for dressing.....	W. Hebdon and T. F. Mathews.	203,038	Apr. 30, 1878	1285		13	799
Textile fabrics, Machine for cutting.....	A. Warth.	202,900	Apr. 23, 1878	1139	327	13	767
Textile fabrics, Machine for cutting.....	A. Warth.	202,901	Apr. 23, 1878	1140	327	13	767
Textile fabrics, &c., Machine for winding and trimming.....	W. R. Schürmann.	208,856	Oct. 8, 1878	433	126	14	554
Thermometer.....	E. C. Clark.	208,814	Oct. 1, 1878	58	18	14	497
Thermometer.....	J. S. F. Stoddleston.	199,442	Jan. 22, 1878	750	220	13	141
Thermometer-case.....	F. A. Stohmann.	210,274	Nov. 26, 1878	823	243	14	802
Thermostat, Mercurial.....	W. B. Farrar.	200,382	Feb. 19, 1878	514	152	13	328
Thill and harness, Combined.....	R. B. Boynton.	207,387	Aug. 27, 1878	780	232	14	317
Thill-coupling.....	C. L. Alexander, B. L. Osborn, and J. G. Anthony.	199,951	Feb. 5, 1878	62	20	12	242
Thill-coupling.....	H. E. Braunfeld.	207,587	Sept. 3, 1878	3	2	14	349
Thill-coupling.....	J. Carr.	208,671	Oct. 8, 1878	230	66	14	527
Thill-coupling.....	T. W. Chapman and E. King.	208,512	Oct. 1, 1878	56	18	14	497
Thill-coupling.....	G. H. Collins.	208,372	Sept. 24, 1878	864	251	14	470
Thill-coupling.....	A. W. Cottrell.	210,921	Dec. 17, 1878	607	168	14	919
Thill-coupling.....	L. R. Crotty.	209,234	Oct. 22, 1878	896	251	14	621
Thill-coupling.....	D. Dalzell.	210,092	Nov. 19, 1878	616	183	14	771
Thill-coupling.....	J. Dufour.	204,547	June 4, 1878	115	39	13	1039
Thill-coupling.....	C. E. Gillespie and H. J. and F. J. Springer.	207,115	Aug. 20, 1878	491	147	14	274
Thill-coupling.....	R. A. Goldsmith.	201,107	Mar. 12, 1878	290	90	13	469
Thill-coupling.....	J. T. Hards.	207,415	Aug. 27, 1878	812	240	14	321
Thill-coupling.....	A. Harvey and M. R. Thurber.	205,958	July 16, 1878	562	160	14	89
Thill-coupling.....	G. W. Haskell.	205,682	June 18, 1878	705	209	13	1112
Thill-coupling.....	C. H. Holdredge and C. H. Cowan.	206,948	Aug. 13, 1878	312	95	14	248
Thill-coupling.....	H. Howell.	200,793	Feb. 26, 1878	940	277	13	491
Thill-coupling.....	H. J. Iles.	200,832	Mar. 5, 1878	19	7	13	417
Thill-coupling.....	D. A. Johnson.	198,803	Jan. 1, 1878	86	23	13	21
Thill-coupling.....	A. E. Kimberly.	208,400	Sept. 24, 1878	891	260	14	474
Thill-coupling.....	J. J. D. Kingsbury.	204,494	June 4, 1878	71	24	13	1022
Thill-coupling.....	J. Lauth.	205,753	July 9, 1878	328	95	14	54
Thill-coupling.....	J. J. Mann.	209,491	Oct. 29, 1878	1135	331	14	663
Thill-coupling.....	E. L. Marshall.	200,143	Feb. 12, 1878	262	78	13	282
Thill-coupling.....	E. R. Mason.	202,846	Apr. 23, 1878	1083	309	13	760
Thill-coupling.....	A. E. Mook.	207,433	Aug. 27, 1878	828	245	14	323
Thill-coupling.....	N. A. Newton.	207,816	Sept. 10, 1878	246	77	14	382
Thill-coupling.....	W. S. Palmer.	206,965	Aug. 13, 1878	328	100	14	250
Thill-coupling.....	T. H. Pate.	199,662	Jan. 29, 1878	1007	293	13	189
Thill-coupling.....	A. Prosser.	208,762	Oct. 8, 1878	330	94	14	540
Thill-coupling.....	L. E. Thayer.	201,962	Apr. 2, 1878	99	28	13	613
Thill-coupling.....	G. W. Wells.	199,884	Jan. 29, 1878	1213	356	13	221
Thill-coupling.....	W. L. Wheeler.	203,096	Apr. 30, 1878	1338	389	13	797
Thill-coupling.....	D. D. Whitney.	200,591	Feb. 19, 1878	718	211	13	359

*Alphabetical list of inventions—Continued.*

Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Thill-couplings, Anti-rattler for .....	G. H. Collins .....	209,461	Oct. 29, 1878	1108	322	14	650
Thill-couplings, Device for compressing rubbers in ..	H. U. Upjohn .....	198,759	Jan. 1, 1878	36	9	13	13
Thill-supporter .....	W. Smith .....	200,031	Nov. 12, 1878	430	130	14	742
Thimble-skein .....	A. M. Disbrow .....	207,507	Aug. 27, 1878	907	267	14	332
Thrasher and huller, Clover .....	L. V. Southworth .....	208,210	Sept. 17, 1878	680	200	14	444
Thrasher and separator, Grain .....	A. J. Hoag .....	207,418	Aug. 27, 1878	815	241	14	321
Thrasher and separator, Grain .....	B. Jackson .....	206,456	July 30, 1878	1149	{ 329 330 }	14	170
Thrasher, Band-cutting feeder for .....	M. M. Hooton .....	202,546	Apr. 16, 1878	747	216	13	710
Thrashers, Clover-hulling attachment for .....	J. Allonas .....	204,276	May 28, 1878	1138	326	13	987
Thrashing-machine .....	L. Bronson .....	210,747	Dec. 10, 1878	394	{ 107 108 }	14	883
Thrashing-machine .....	J. Brown .....	203,318	May 7, 1878	90	26	13	832
Thrashing-machine .....	J. E. Glover .....	204,813	June 11, 1878	409	120	13	1070
Thrashing-machine .....	P. Parrott .....	209,708	Nov. 5, 1878	184	54, 55	14	705
Thrashing-machine .....	H. B. Stevens .....	202,293	Apr. 9, 1878	459	134	13	608
Thrashing-machine brace .....	J. Wisda .....	203,398	May 7, 1878	170	49	13	844
Thrashing-machine feeder .....	M. L. Mery .....	201,696	Mar. 26, 1878	918	281	13	566
Thrashing-machine feeder .....	R. R. Moore .....	198,995	Jan. 8, 1878	288	84	13	60
Thrashing-machine frame .....	T. Harrison .....	205,263	June 25, 1878	903	267	13	1144
Thrashing-machine teeth, Die for making .....	J. C. Richardson and T. R. Morgan ..	207,069	Aug. 13, 1878	426	132	14	202
Thrashing-machines, Band-cutting attachment for ..	M. W. Freeman .....	210,456	Dec. 3, 1878	70	18	14	833
Thrashing-machines, Band-cutting feeder for .....	H. K. Andrews .....	199,172	Jan. 15, 1878	477	141	13	90
Thrashing-machines, Band-cutting feeder for .....	W. E. Harwell .....	199,202	Jan. 15, 1878	507	149	13	95
Thrashing-machines, Band-cutting feeder for .....	M. H. Joslyn .....	198,985	Jan. 8, 1878	274	79	13	58
Thrashing-machines, Band-cutting feeder for .....	J. M. O'Neill .....	209,580	Nov. 5, 1878	45	12	14	687
Thrashing-machines, Dust-conveyer for .....	E. S. Churchman .....	201,331	Mar. 19, 1878	540	166	13	508
Thread-holder .....	J. Dunn .....	201,656	Mar. 26, 1878	886	270	13	561
Ticket and label holder .....	J. H. Mitchell .....	209,285	Oct. 22, 1878	914	267	14	628
Ticket-case .....	L. E. Heaton .....	203,617	May 14, 1878	411	117	13	884
Ticket, Passenger .....	A. C. Sheldon .....	208,933	Oct. 15, 1878	527	154	14	571
Ticket, Railway .....	W. E. Davis .....	200,264	Feb. 12, 1878	382	113	13	300
Ticket, Railway coupon .....	C. J. Stromberg .....	204,174	May 28, 1878	1033	294	13	974
Ticket-reel .....	T. D. Haeblen .....	208,906	Oct. 15, 1878	498	143	14	567
Tickets, Machine for making wired .....	A. Kimball .....	201,684	Mar. 26, 1878	907	{ 277 278 }	13	564
Tie:							
See Bag-tie.	Letter-package tie.						
Bale-tie.	Neck-tie.						
Cattle-tie.	Railway-tie.						
Cross-tie.	Railway cross-tie.						
Horse-tail tie.							
Tile, Border .....	J. S. Brown .....	205,832	July 9, 1878	414	118	14	65
Tile for fire-proof buildings, Bridge .....	M. F. Lyons .....	204,347	May 28, 1878	1213	346	13	997
Tile-laying machine .....	J. I. and W. J. Mettler .....	200,557	Feb. 19, 1878	684	201	13	354
Tile-laying machine .....	J. I. and W. J. Mettler .....	201,548	Mar. 19, 1878	761	{ 231 232 }	13	539
Tile-machine .....	I. C. Nichols .....	200,354	Oct. 29, 1878	998	290	14	642
Tile-machine .....	M. Moore .....	202,454	Apr. 16, 1878	641	187	13	697
Tile machines, Roller for drain .....	A. Horrocks and E. D. Stevens ..	199,712	Jan. 29, 1878	1054	308	13	196
Tile or brick kiln .....	R. G. McCullough .....	200,743	Feb. 26, 1878	895	263	13	393
Tile, Paving and flooring .....	T. New .....	206,601	July 30, 1878	1302	374	14	189
Tiles, bricks, &c., Drying-car for drain .....	W. W. Arnold and J. T. McGuire ..	207,638	Sept. 3, 1878	57	17	14	356
Tiles, Machine for making paving and building ..	A. H. Austin .....	203,811	May 21, 1878	630	177	13	919
Till-alarm .....	M. L. Morgan .....	206,190	July 23, 1878	826	{ 235 236 }	14	125
Tilting-chair .....	C. B. Hitchcock .....	204,573	June 4, 1878	141	47	13	1033
Tilting-chair .....	H. Parry .....	199,857	Jan. 29, 1878	1189	349	13	217
Tilting-chairs, Spring for .....	H. Howson .....	210,779	Dec. 10, 1878	428	119	14	888
Timber, Preserving .....	W. Thilmany .....	202,678	Apr. 23, 1878	905		13	757
Time-check, Electro-magnetic watchman's .....	W. O. Lewis .....	203,747	May 14, 1878	549	155	13	992
Time-check, Watchman's .....	W. E. Young .....	198,962	Jan. 8, 1878	252	72	13	55
Time-detector, Watchman's .....	J. H. Marvel .....	204,063	May 21, 1878	895	256	13	953
Time-indicator, Letter-box .....	J. H. Rouse .....	205,142	June 18, 1878	765	226	13	1120
Time-indicator, Watchman's .....	F. Imhaeuser .....	206,572	July 30, 1878	1273	366	14	185
Time-keepers, Balance-spring for .....	M. D. Berlitz and H. P. Morgan ..	200,642	Nov. 5, 1878	117	34	14	697
Time-lock .....	M. A. Dalton .....	199,520	Jan. 22, 1878	832	243	13	154
Time-lock .....	H. Gross .....	209,561	Nov. 5, 1878	25	8	14	684
Time-lock .....	J. L. Hall .....	206,872	Aug. 13, 1878	235	75	14	240
Time-lock .....	T. F. Keating .....	205,275	June 25, 1878	914	271	13	1145
Time-lock .....	P. F. King .....	201,535	Mar. 19, 1878	747	228	13	537
Time-lock .....	W. Kook and J. L. Hall .....	206,677	Aug. 6, 1878	20	6	14	209
Time-lock .....	L. C. and S. M. Lillie .....	199,454	Jan. 22, 1878	764	224	13	143
Time-lock .....	S. M. Lillie .....	206,887	Aug. 13, 1878	251	79	14	241
Time-lock .....	E. Stewart .....	206,981	Aug. 13, 1878	341	105	14	252
Time-lock .....	E. Stockwell .....	206,146	July 16, 1878	758	{ 218 219 }	14	113
Time-lock .....	J. Weimar .....	210,070	Nov. 19, 1878	593	177	14	767
Time-lock for safes, &c. ....	I. F. King .....	200,312	Feb. 12, 1878	429	{ 128 129 }	13	307
Time-lock for safes .....	W. Kook and J. L. Hall .....	206,678	Aug. 6, 1878	22	7	14	209
Time-recorder, Electro-magnetic watchman's ..	W. E. Phelps .....	198,814	Jan. 1, 1878	95	26	13	22
Time-signal .....	J. A. De Macedo .....	199,419	Jan. 22, 1878	732	215	13	138
Tin can .....	S. H. Bradford .....	208,065	Sept. 17, 1878	527	157	14	425
Tin-can bodies, Machine for forming .....	E. Mather and G. R. Gleason .....	206,031	July 16, 1878	633	{ 183 184 }	14	98
Tin cups, Securing handles to .....	G. W. Knapp .....	205,653	July 2, 1878	199	60	14	34
Tin from tin-scrap, Separating .....	P. C. Vogellus .....	200,587	Feb. 19, 1878	713		13	359
Tin-scrap and manufacture of stannates, Utilizing ..	J. Holliday and J. Lambert .....	208,735	Oct. 8, 1878	297		14	536
Tin-scrap, Utilizing waste .....	M. A. Sutherland .....	205,770	July 9, 1878	345		14	56
Tinner's stock .....	H. C. Woolson .....	208,451	Sept. 24, 1878	950	279	14	481
Tinning and finishing sheet-copper .....	R. McManus .....	200,079	Feb. 5, 1878	193		13	263
Tinware .....	I. F. Kearns .....	199,370	Jan. 22, 1878	684	201	13	130
Tire-heating furnace .....	A. Doll .....	209,753	Nov. 12, 1878	247	73	14	718

## Alphabetical list of inventions—Continued.

Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. G.	Vol.	Page.
Tire-setter .....	J. A. Mills .....	204, 236	May 28, 1878	1105	315	13	983
Tire setting and cooling apparatus .....	W. John .....	204, 738	June 11, 1878	327	90	13	1061
Tire-setting machine .....	J. B. West .....	200, 637	Feb. 26, 1878	782	230	13	377
Tire-setting machine .....	B. F. Young .....	205, 227	June 25, 1878	867	256	13	1139
Tire-tightener .....	J. Fox .....	210, 195	Nov. 26, 1878	740	220	14	791
Tire-tightener .....	E. S. Gibbs .....	199, 700	Jan. 29, 1878	1044	305	13	195
Tire tightener, Vehicle .....	G. A. Hall .....	204, 563	June 4, 1878	131	44	13	1031
Tire-upsetter .....	J. W. Bodge .....	202, 220	Apr. 9, 1878	386	113	13	638
Tire-upsetter .....	M. W. Griffiths .....	204, 317	May 28, 1878	1183	336	13	993
Tire-upsetter and shears combined .....	I. N. and W. Pennock .....	200, 334	Feb. 12, 1878	454	134	13	310
Tobacco, Apparatus for spraying .....	C. S. Phillips .....	201, 190	Mar. 12, 1878	376	117	13	479
Tobacco-bag fastening .....	T. T. Watson .....	211, 077	Dec. 17, 1878	793	218	14	941
Tobacco, Chewing .....	H. N. Rittenhouse .....	210, 303	Nov. 26, 1878	923	....	14	815
Tobacco, Composition for treating .....	J. Trent .....	202, 080	Apr. 23, 1878	907	....	13	738
Tobacco-curing apparatus .....	D. V. Davis .....	200, 789	Feb. 26, 1878	936	279	13	400
Tobacco-curing apparatus .....	J. S. Melvin .....	204, 592	June 4, 1878	163	58	13	1036
Tobacco-cutter .....	A. S. Bunker .....	207, 498	Aug. 27, 1878	899	265	14	331
Tobacco-cutter .....	J. Farrar .....	201, 338	Mar. 19, 1878	649	189	13	509
Tobacco cutter, Plug .....	S. P. Dick and D. R. Musselman .....	201, 015	Apr. 2, 1878	57	15	13	907
Tobacco-cutting machine .....	J. W. Crossley, A. A. Hagen, and G. Juenget .....	204, 715	June 11, 1878	302	98	13	1056
Tobacco-cutting machine .....	E. Durand .....	210, 927	Dec. 17, 1878	612	169	14	920
Tobacco-cutting machine .....	C. Hemje .....	207, 868	Sept. 10, 1878	307	93, 94	14	391
Tobacco-cutting machine .....	J. F. Tygh .....	202, 608	Apr. 16, 1878	810	234	13	717
Tobacco-cutting machine .....	R. Wilson and D. McCallay .....	207, 146	Aug. 20, 1878	520	156	14	778
Tobacco, Device for handling hogaheads of .....	V. Black .....	201, 220	Mar. 12, 1878	402	123	13	482
Tobacco, Device for marking plug .....	H. C. Holbrook .....	204, 042	May 21, 1878	873	250	13	930
Tobacco, Device for packing smoking .....	W. J. Cussen .....	205, 301	June 25, 1878	1014	209	13	1157
Tobacco-drying machine .....	W. B. Isaacs .....	199, 367	Jan. 22, 1878	682	200	13	130
Tobacco, Flavoring .....	M. Chambers .....	207, 106	Aug. 20, 1878	483	....	14	274
Tobacco for use as a moth-preventive, Treating paper or other fabric with .....	J. H. Pickett .....	203, 766	May 14, 1878	569	....	13	904
Tobacco-germer .....	J. Woods .....	203, 978	May 21, 1878	803	230	13	941
Tobacco-granulating machine .....	C. Du Brul .....	209, 802	Nov. 12, 1878	296	88	14	724
Tobacco-granulating machine .....	N. Du Brul .....	209, 801	Nov. 12, 1878	295	88	14	724
Tobacco-granulating machine .....	N. Du Brul .....	210, 191	Nov. 26, 1878	787	219	14	791
Tobacco-granulating machine .....	C. W. Simpson and G. C. Howard .....	207, 140	Aug. 20, 1878	514	155	14	277
Tobacco, Labeling plugs of .....	H. W. Hunt .....	200, 062	Feb. 5, 1878	172	55	13	260
Tobacco-leaves, Process and apparatus for coloring .....	E. Wenderoth .....	206, 156	July 16, 1878	773	221	14	115
Tobacco machine, Fine-cut .....	G. B. F. Cooper .....	204, 539	June 4, 1878	108	36, 37	13	1023
Tobacco, Machine for marking plug .....	S. W. Venable .....	209, 520	Oct. 29, 1878	1177	342	14	668
Tobacco machine, Lump .....	J. F. Wooldridge, J. F. Nys- trom, and L. D. Howard .....	204, 871	June 11, 1878	473	137	13	1078
Tobacco machine, Plug .....	E. P. Jones, J. D. McComber, and J. P. McCook .....	207, 121	Aug. 20, 1878	496	149	14	275
Tobacco, Manufacture of plug .....	D. W. DeForest .....	202, 245	Apr. 9, 1878	412	120	13	661
Tobacco, Marking-frame for plug .....	D. W. DeForest .....	199, 024	Jan. 29, 1878	969	282	13	183
Tobacco, Marking plug .....	J. T. Drummond .....	200, 133	Feb. 12, 1878	251	76	13	280
Tobacco, Marking plug .....	C. Siedler .....	209, 143	July 16, 1878	755	217	14	112
Tobacco, Marking plug .....	W. T. Yarbrough .....	205, 460	June 25, 1878	1105	328	13	1170
Tobacco measuring and packing machine .....	C. C. Clawson .....	198, 793	Jan. 1, 1878	77	20	13	19
Tobacco-package .....	T. E. Allen .....	200, 239	Feb. 12, 1878	362	105	13	296
Tobacco, Package for plug .....	E. R. Bearn .....	201, 245	Mar. 12, 1878	431	132	13	486
Tobacco, Package of plug .....	R. M. Smith .....	208, 342	Sept. 24, 1878	835	244	14	467
Tobacco-package receptacle .....	H. N. Mann .....	208, 187	Sept. 17, 1878	637	193	14	441
Tobacco, Packing .....	J. P. McCook .....	219, 908	Nov. 12, 1878	401	120	14	739
Tobacco-pail .....	J. T. Emerick .....	199, 628	Jan. 29, 1878	974	283	13	184
Tobacco-pipe .....	J. M. Baum .....	206, 699	Aug. 6, 1878	44	14	14	212
Tobacco-pipe .....	G. Castleden .....	210, 598	Dec. 10, 1878	237	65	14	684
Tobacco-pipe .....	W. Donuth .....	200, 030	Feb. 5, 1878	134	44	13	254
Tobacco-pipe .....	W. Heyenga .....	208, 597	Oct. 1, 1878	143	42	14	508
Tobacco-pipe .....	S. H. Thurston .....	204, 774	June 11, 1878	368	110	13	1068
Tobacco-pipe cover .....	T. A. Van Norden .....	200, 882	Mar. 5, 1878	67	23	13	425
Tobacco-plants, Machine for setting .....	W. Heyenga .....	208, 596	Oct. 1, 1878	142	41	14	508
Tobacco, Plug .....	F. M. Meyer .....	202, 452	Apr. 10, 1878	639	186	13	697
Tobacco, Plug .....	F. S. Kinney .....	200, 202	Feb. 12, 1878	319	95	13	291
Tobacco, Plug .....	R. W. Oliver .....	199, 989	Feb. 5, 1878	97	32	13	248
Tobacco-press .....	F. W. A. Fuller .....	210, 248	Nov. 26, 1878	794	235	14	798
Tobacco-pulp, Machine for coating paper with .....	T. J. Ferguson .....	201, 340	Mar. 19, 1878	551	169	13	510
Tobacco-quill protector .....	S. S. Henderson .....	200, 017	July 16, 1878	619	178	14	96
Tobacco rolling and cutting machine .....	H. W. Holley .....	209, 708	Nov. 12, 1878	302	90	14	725
Tobacco-stem crusher .....	N. H. Borgfeldt .....	202, 050	Apr. 23, 1878	924	264	13	739
Tobacco-stem flattener .....	N. H. Borgfeldt .....	200, 246	Feb. 12, 1878	360	107	13	297
Tobacco, Substitute for .....	W. Davies .....	203, 600	May 14, 1878	398	113	13	893
Tobacco-washer .....	J. P. R. James .....	210, 538	Dec. 3, 1878	161	....	14	844
Toilet articles, &c., Case for .....	H. Messmer .....	202, 508	Apr. 10, 1878	789	222	13	712
Toilet-cabinet .....	H. Gringmuth .....	208, 731	Oct. 8, 1878	293	84	14	535
Tongs, Blacksmith's .....	G. Rivera .....	200, 480	Feb. 19, 1878	609	179	13	342
Tongs, Log .....	J. H. Alker .....	200, 238	Feb. 12, 1878	351	105	13	296
Tongs, Pipe .....	J. J. Ryan .....	203, 198	Apr. 30, 1878	1451	424	13	812
Tongs, Pipe .....	H. Badcock .....	202, 089	Apr. 9, 1878	248	73	13	639
Tongs, Pipe .....	J. Corbin .....	203, 503	May 14, 1878	393	111	13	882
Tongs, Pipe .....	G. A. Harbaugh .....	199, 539	Jan. 22, 1878	835	250	13	157
Tongs, Pipe .....	A. H. Jarecki .....	206, 795	Aug. 6, 1878	144	45	14	224
Tongs, Pipe .....	O. B. Lay .....	210, 098	Dec. 10, 1878	342	93, 94	14	677
Tongs, Pipe .....	J. A. White .....	210, 383	Nov. 26, 1878	949	275	14	818
Tongs, Rooding .....	T. B. Beeson .....	204, 526	June 4, 1878	97	33	13	1096
Tongue and thill support, Vehicle .....	O. P. Tripp .....	204, 113	May 21, 1878	948	272	13	839



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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Tongue, Cultivator	W. P. Brown	199,025	Jan. 8, 1878	313	92	13	64
Tongue support, Wagon	L. D. Brown	201,323	Mar. 19, 1878	533	164	13	507
Tongue support, Wagon	D. B. Hart and W. P. Webster	203,339	May 7, 1878	107	31	14	834
Tongue support, Wagon	T. Morgan	199,092	Jan. 8, 1878	379	112	13	75
Tongues, Neck-yoke attachment for wagon	A. J. Clemmons and H. M. Hills	200,977	Mar. 5, 1878	153	50	13	439
Tonguing and grooving machine	W. S. Mayo	208,323	Sept. 24, 1878	814	238	14	464
Tool	W. M. Lamb	203,052	Apr. 30, 1878	1296	376	13	792
Tool and handle, Farmer's	A. T. Clark	207,643	Sept. 3, 1878	63	19	14	357
Tool, Combination	D. S. Dyson	209,803	Nov. 12, 1878	901	89	14	724
Tool, Combined	P. Campbell	207,500	Aug. 27, 1878	901	265	14	331
Tool, Garden	J. D. Shaffer	210,155	Nov. 19, 1878	683	203	14	780
Tool-handle	P. A. Gladwin	202,105	Apr. 9, 1878	204	78	13	641
Tool-handle	W. Millsbaugh	208,256	Sept. 24, 1878	746	219	14	456
Tool-handle	W. Millsbaugh	209,704	Nov. 5, 1878	182	54	14	705
Tool-handle	J. E. Parrish	200,932	Mar. 5, 1878	110	37	13	432
Tool-handle	A. S. Pennington	210,555	Dec. 3, 1878	178	47	14	846
Tool-handle	D. Steele	207,781	Sept. 3, 1878	200	61	14	374
Tool-handle attachment	G. P. Morrill	207,671	Sept. 3, 1878	88	27	14	360
Tool-handles, Tamping-cap for	J. F. Milligan	206,814	Aug. 6, 1878	159	50	14	226
Tool-rest, Portable	O. Olsen	210,937	Dec. 17, 1878	645	179	14	924
Tooth-pick	J. Holland	209,566	Nov. 5, 1878	33	10	14	685
Tooth-powder box	H. Bell	208,145	Sept. 17, 1878	611	181	14	436
Top, Musical	C. Gernert	201,106	Mar. 12, 1878	289	89	13	466
Top, Musical	T. W. Harrison	201,345	Mar. 19, 1878	555	170	13	510
Top, Spinning	A. Denayrouze	209,238	Oct. 22, 1878	870	253	14	622
Top, Spinning	C. Raetz	202,118	Apr. 9, 1878	278	82	13	643
Top-spinning device	E. D. Mackintosh	199,559	Jan. 22, 1878	872	255	13	161
Torpedo and means for propelling the same, Submarine.	J. Ericsson	203,435	May 7, 1878	211	61	13	849
Torpedo-boat	H. Mortensen	202,453	Apr. 16, 1878	640	187	13	697
Torpedo boat, Spar	W. H. Mallory	199,841	Jan. 29, 1878	1176	345	13	215
Torpedo, Coffin	P. K. Clover	208,672	Oct. 8, 1878	231	66	14	527
Torpedo for oil-wells	J. J. Boyer	200,164	Feb. 12, 1878	284	84	13	285
Torpedo for oil-wells	J. Briscoe	205,040	June 18, 1878	661	194	13	1107
Torpedo for oil-wells	W. Haus	203,034	Apr. 30, 1878	1281	371	13	790
Torpedo for oil-wells	H. L. Porter	207,678	Sept. 3, 1878	95	28	14	361
Torpedo for oil-wells	E. A. L. Roberts	200,570	Feb. 19, 1878	697	205	13	356
Torpedo for oil-wells	G. S. Vanghn	200,491	Feb. 19, 1878	619	182	13	344
Torpedo for oil-wells	P. E. Wellman	207,325	Aug. 20, 1878	700	209	14	301
Torpedoes, Raising and lowering	W. D. Smith	207,564	Aug. 27, 1878	974	285 286	14	340
Tortoise-shell, Imitation of	A. Miller	207,617	Sept. 3, 1878	33	-----	14	353
Towel-rack	W. H. Castle	204,713	June 11, 1878	300	93	13	1058
Toy	W. S. Clow	207,346	Aug. 27, 1878	743	221	14	312
Toy	J. Gallott	208,677	Oct. 8, 1878	239	68	14	528
Toy	J. H. Hawes	204,970	June 18, 1878	594	173	13	1098
Toy	E. R. Ives	201,678	Mar. 26, 1878	903	276	13	564
Toy	A. M. Knapp	208,102	Sept. 17, 1878	561	168	14	429
Toy	W. La Montagne	209,274	Oct. 22, 1878	906	264	14	626
Toy	S. Potts	202,754	Apr. 23, 1878	982	282	13	747
Toy	W. S. Reed	203,775	May 14, 1878	580	162	13	905
Toy	W. S. Reed	203,776	May 14, 1878	580	163	13	905
Toy	E. M. Shirley	208,543	Oct. 1, 1878	87	25	14	500
Toy ark	G. H. Ireland	201,879	Apr. 2, 1878	22	6	13	601
Toy, Automatic	A. J. Davis	209,468	Oct. 29, 1878	1113	324 325	14	659
Toy, Automatic	H. Pattberg and A. Gaertner	199,858	Jan. 29, 1878	1190	349	13	217
Toy, Automatic swimming	E. Martin	207,188	Aug. 20, 1878	563	169	14	283
Toy balloon	W. C. Schwartz	208,637	Oct. 1, 1878	185	53	14	513
Toy, Bandelore	W. Katz	207,527	Aug. 27, 1878	934	274	14	335
Toy bank	D. J. MacLean	203,927	May 21, 1878	747	216	13	934
Toy bank	E. R. Morrison	206,893	Aug. 13, 1878	264	80	14	242
Toy, Bell	P. H. Hillard	201,180	Mar. 12, 1878	361	111	13	476
Toy building-block	D. E. Stone	208,047	Sept. 17, 1878	511	152	14	422
Toy carriage	H. Groth	200,714	Feb. 26, 1878	869	255	13	389
Toy, Chromatope buzz	H. Van Altena	208,351	Sept. 24, 1878	844	246	14	468
Toy, Detonating	J. McConnell	209,768	Nov. 12, 1878	263	78	14	720
Toy, Flying	W. S. Hull	205,647	July 2, 1878	190	57	14	33
Toy, Flying	C. Mettam	202,281	Apr. 9, 1878	448	131	13	666
Toy galloping horse and carriage	A. Q. Ross	209,777	Nov. 12, 1878	269	80	14	721
Toy, Jumping	C. E. Chinnock	202,990	Apr. 30, 1878	1237	358	13	784
Toy money-box	B. M. Abell and F. Brecht	200,885	Mar. 5, 1878	69	24	13	426
Toy money-box	J. Gérard	209,038	Oct. 15, 1878	642	186	14	585
Toy money-box	W. H. Lotz	200,402	Feb. 19, 1878	532	157	13	331
Toy money-box	S. Whitnum	206,376	July 23, 1878	1047	301	14	153
Toy musical instrument	L. Anderson	200,964	Mar. 5, 1878	139	45	13	437
Toy, Perambulating	S. W. Adams	210,480	Dec. 3, 1878	91	23	14	836
Toy pistol	A. F. Able	204,123	May 28, 1878	980	279	13	967
Toy pistol	L. Braun	205,039	June 18, 1878	661	194	13	1107
Toy pistol	J. Brunner	205,240	June 25, 1878	883	261	13	1141
Toy pistol	L. Greget	209,884	Nov. 12, 1878	380	113	14	736
Toy pistol	J. McConnell	201,189	Mar. 12, 1878	370	115	13	478
Toy pistol	H. A. Smith	210,971	Dec. 17, 1878	662	182	14	926
Toy pistol	H. J. P. Whipple	204,405	May 28, 1878	1272	363	13	1004
Toy pistol, Top-spinning	C. Mohr	202,742	Apr. 23, 1878	968	278	13	745
Toy revolver	A. Dahler and F. W. Hoffmann	201,392	Mar. 19, 1878	603	185	13	517
Toy steam fire-engine apparatus	G. H. Ireland	203,459	May 7, 1878	237	67, 68	13	853
Toy torpedo	W. H. Reiff	210,267	Nov. 26, 1878	814	241	14	801
Toy trundle	G. W. Craig	201,999	Apr. 2, 1878	137	39	13	619
Toy, Trundle	E. C. Kirkpatrick	203,165	Apr. 30, 1878	1415	412	13	807
Toy, Trundling	J. R. King	203,624	May 14, 1878	477	119	13	885
Toy vehicle	F. R. Howard	202,651	Apr. 23, 1878	877	251	13	734
Toy watch and clock	J. G. Powell	204,607	June 4, 1878	181	58	13	1038
Toy watches, Escapement for	J. G. Powell	204,606	June 4, 1878	179	57, 58	13	1038
Toy, Wheeled	J. H. Wygant	201,729	Mar. 26, 1878	955	292	13	571



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Toy wheeled vehicle .....	J. K. Barton .....	201,981	Apr. 2, 1878	118	24	13	616
Trace and hame-tug coupling .....	G. Hazlewood, jr., and J. Reagin .....	204,324	May 28, 1878	1190	339	13	994
Trace attachment .....	J. B. McNair .....	204,677	June 11, 1878	261	81	13	1053
Trace-carrier .....	W. B. Burns .....	202,986	Apr. 30, 1878	1235	357	13	784
Trace-carrier .....	R. R. Goodrich and J. J. A. Parker .....	207,513	Aug. 27, 1878	918	270	14	333
Trace-carrier .....	R. R. Hart .....	201,779	Mar. 26, 1878	1007	308	13	579
Trace-carrier .....	W. B. Hayden .....	200,292	Feb. 12, 1878	409	122	13	304
Trace-carrier .....	S. S. Sargeant .....	201,452	Mar. 19, 1878	663	202	13	325
Trace-carrier .....	C. C. Schwaner .....	199,748	Jan. 29, 1878	1085	318	13	201
Trace-carrier .....	M. E. Zeller .....	202,502	Apr. 16, 1878	681	200	13	704
Trace-carrier and back-band buckle .....	J. T. Gathright .....	198,800	Jan. 1, 1878	82	22	13	20
Trace-coupling .....	J. Forney .....	202,806	Apr. 23, 1878	1039	299	13	755
Trace-fastening .....	L. P. Crandall .....	205,359	June 25, 1878	1011	299	13	1157
Trace-fastening, Adjustable .....	A. Rutherford .....	203,780	May 14, 1878	584	164	13	906
Trace-holder .....	J. Gallaspie .....	203,028	Apr. 30, 1878	1277	369	13	789
Trace trimming and creasing machine .....	T. H. Thompson .....	201,208	Mar. 12, 1878	388	120	13	481
Trace, Wire-rope harness .....	F. M. Collier .....	202,153	Apr. 9, 1878	313	93	13	648
Track-clearer .....	C. Bopp .....	201,492	Mar. 19, 1878	701	214	13	531
Track-clearer .....	A. Day .....	204,205	May 28, 1878	1071	305	13	979
Track-clearer .....	W. T. Guntler .....	204,031	May 21, 1878	865	247	13	949
Track-clearer .....	G. Royal .....	203,377	May 7, 1878	149	43	13	841
Track-clearer .....	G. Royal .....	204,092	May 21, 1878	925	265	13	957
Track-raiser .....	C. W. Hornor .....	206,673	Aug. 6, 1878	17	5	14	209
Traction-engine .....	R. Broja .....	210,492	Dec. 3, 1878	102	27	14	837
Traction-engine .....	M. Fortin .....	202,429	Apr. 16, 1878	615	180	13	694
Trading-pit .....	R. S. Jennings .....	203,837	May 21, 1878	654	186	13	922
Tramway and apparatus, Rope .....	T. H. Day .....	203,249	May 7, 1878	12	5	13	822
Tramways, Clip for rope .....	A. S. Hallidie .....	210,851	Dec. 17, 1878	512	145	14	908
Transom-lifter .....	W. B. Mitchell .....	200,869	Mar. 5, 1878	55	19	13	423
Transom-lifter .....	A. F. Pfeifer .....	200,753	Feb. 26, 1878	905	266	13	395
Transom-lifter .....	J. H. R. Prall .....	199,465	Jan. 22, 1878	774	227	13	145
Transplanter .....	H. Avery .....	208,703	Oct. 8, 1878	265	76	14	532
Transplanter .....	L. F. Johnston .....	206,576	July 30, 1878	1278	367	14	186
Transplanter and hoe combined .....	M. Wilson .....	202,909	Apr. 23, 1878	1147	329	13	767
Transplanting-tool .....	J. C. Bowman .....	199,501	Jan. 22, 1878	810	237	13	151
Trap:							
See Animal-trap.	Moth-trap.						
Ball-trap.	Plumber's trap.						
Drain and waste pipe trap.	Sewer-trap.						
Drain, sewer, &c., trap.	Sewer-gas trap.						
Fish-trap.	Sink-trap.						
Fly-trap.	Steam-trap.						
Hog-trap.	Stench-trap.						
Hydrant sewer-trap.	Water-trap.						
Insect-trap.	Water-closet trap.						
Water-pipe trap.							
Trap .....	W. Christie .....	209,653	Nov. 5, 1878	130	38	14	698
Trash-gatherer .....	B. F., W. P., and J. Rarick .....	202,051	Apr. 2, 1878	191	55	13	626
Traveling-bag .....	M. C. Schutz .....	204,618	June 4, 1878	198	63	13	1040
Traveling-bag frame .....	M. C. Schutz .....	202,379	Apr. 16, 1878	567	166	13	687
Traveling-bag handle .....	R. W. Chapman .....	208,793	Oct. 8, 1878	364	104	14	545
Traveling-bag handle .....	G. Willinghaus .....	203,516	May 7, 1878	292	83	13	861
Traveling bags and satchels, Handle attachment for .....	E. Rump and A. Weinreich .....	209,926	Nov. 12, 1878	422	127	14	741
Traveling-bags, Fastening device for .....	J. W. Lieb .....	204,743	June 11, 1878	332	100	13	1062
Traveling-box, Pocket .....	D. M. Somers .....	209,933	Nov. 12, 1878	431	130	14	742
Tray, Child's table .....	C. Gillard .....	208,807	Oct. 8, 1878	350	108	14	547
Tray machine, Wooden .....	J. S. Brown and L. Kimball, jr. ....	202,146	Apr. 9, 1878	305	90, 91	13	646
Tread-mill .....	R. A. Brown .....	202,783	Apr. 23, 1878	1012	290	13	751
Treadle .....	W. Levin .....	207,750	Sept. 3, 1878	169	52	14	370
Treadle-machine .....	S. Haas .....	200,390	Feb. 19, 1878	522	154	13	329
Treadle-motion .....	A. L. Akins .....	206,914	Aug. 13, 1878	282	86	14	245
Treadle-motion .....	T. F. Woodbridge and A. P. Gerlach .....	199,484	Jan. 22, 1878	792	233	13	148
Treadle-power .....	I. M. Rhodes .....	209,079	Oct. 15, 1878	692	200	14	592
Tree:							
See Artificial tree.	Saddle-tree.						
Harness-tree.	Shoe-tree.						
Tree-protector .....	J. W. Bowdoin .....	205,721	July 9, 1878	293	86	14	49
Tree-protector .....	H. R. Daggett .....	199,355	Jan. 22, 1878	670	196	13	128
Tree-protector .....	T. Doak .....	203,898	May 21, 1878	718	206	13	950
Tree-protector .....	J. Grant and A. G. Cook .....	204,561	June 4, 1878	130	44	13	1031
Trees, Composition for protecting .....	B. J. Timby .....	203,674	May 14, 1878	473	.....	13	892
Treenails, Machine for turning .....	W. S. Auchincloss .....	205,604	July 2, 1878	142	44	14	27
Trimmer:							
See Finger-nail trimmer.	Stalk-trimmer.						
Hedge-trimmer.	Stay-bolt trimmer.						
Spoke-trimmer.	Wall-paper trimmer.						
Trimming .....	G. Simon .....	204,626	June 4, 1878	204	65	13	1041
Trimming, Dress .....	A. Sturm .....	206,640	July 30, 1878	1343	386	14	194
Trimming, Machine for shaping dress .....	G. Simon .....	210,570	Dec. 3, 1878	199	53	14	849
Troche .....	C. F. Asche .....	204,520	June 4, 1878	94	.....	13	1026
Trough:							
See Hog-trough.	Watering-trough.						
Truck and bag-holder, Combined .....	L. Bissell and R. Van Buren .....	206,855	Aug. 13, 1878	217	70	14	237
Truck apparatus for lifting and conveying ingots, pots, &c. ....	A. E. Brown .....	208,222	Sept. 24, 1878	705	208	14	451
Truck, Car .....	G. S. Banger and L. D. Hurd .....	201,217	Mar. 12, 1878	399	{ 122 123 }	13	482
Truck, Car .....	J. Belou .....	207,480	Aug. 27, 1878	878	259	14	328
Truck, Car .....	A. Berry .....	208,058	Sept. 17, 1878	521	156	14	424
Truck, Car .....	G. M. Brill .....	202,922	Apr. 30, 1878	1174	338	13	775
Truck, Car .....	J. G. Divoll .....	200,646	Feb. 26, 1878	793	233	13	379

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Truck, Car	L. D. Hurd	205,390	June 25, 1878	1040	309	13	1161
Truck, Car	S. Lord	201,540	Mar. 19, 1878	753	229	13	538
Truck, Car	E. J. Marsters and R. A. Fisher	202,737	Apr. 23, 1878	961	276	13	744
Truck, Car	W. H. H. Sisum	208,857	Oct. 8, 1878	435	126	14	554
Truck, Car	G. Souther	207,453	Aug. 27, 1878	852	252	14	325
Truck, Car	C. Speidel	202,851	Apr. 23, 1878	1120	322	13	765
Truck, Car	J. G. Tait	210,644	Dec. 10, 1878	289	79	14	870
Truck, Car	G. Vincent	201,309	Mar. 12, 1878	502	154	13	495
Truck, Car	G. Vincent and M. A. Wheaton	201,310	Mar. 12, 1878	503	153	13	495
Truck, Car	G. Vincent	201,311	Mar. 12, 1878	504	153	13	496
Truck, Car	G. Vincent	208,215	Sept. 17, 1878	686	202	14	445
Truck, Changeable-gage	J. Timms	207,998	Sept. 10, 1878	445	133	14	409
Truck, Convertible car	W. L. Rankins	203,499	May 7, 1878	275	79	13	858
Truck, Farm	D. Smith	208,498	Oct. 1, 1878	43	14	14	495
Truck for moving railway-axes, &c.	N. Thomas	206,152	July 16, 1878	769	220	14	114
Truck for street-cars	S. Lord	201,539	Mar. 19, 1878	752	229	13	538
Truck, Freight-car	J. W. Sprague	203,665	May 14, 1878	462	132	13	891
Truck, Garbage	H. B. Gurler	203,144	Apr. 30, 1878	1390	406	13	804
Truck, Hand	W. B. Allen	207,473	Aug. 27, 1878	872	257	14	328
Truck, Hand	C. A. Harper	208,172	Sept. 17, 1878	644	189	14	440
Truck, Portable-engine	W. D. Alford	206,759	Aug. 6, 1878	103	33	14	219
Truck, Railway-car	N. F. Gilman	206,722	Aug. 6, 1878	66	21	14	215
Truck, Railway-car	W. R. Hamilton and G. C. Smith	205,956	July 16, 1878	560	159 160	14	88
Truck, Railway-car	C. M. Kimball	203,163	Apr. 30, 1878	1413	412	13	807
Truck-sides, Machine for making freight-car	R. H. Briggs and J. H. Dougherty	202,984	Apr. 30, 1878	1233	356	13	783
Truck, Stove	W. H. Tucker	208,650	Oct. 1, 1878	200	57	14	515
Truck transfer, Car	T. Post	210,051	Nov. 19, 1878	570	171	14	764
Truck, Warehouse	R. Kent	199,372	Jan. 22, 1878	685	201	13	130
Truck, Water-carrying	F. M. and A. B. Blackman and D. T. Griffing	198,734	Jan. 1, 1878	3	1	13	9
Truck, Center-bearing for locomotive	G. Chalender	210,749	Dec. 10, 1878	396	108	14	883
Trundling-hoop	H. L. Graves	210,419	Dec. 3, 1878	32	7	14	828
Trunk	J. Cottner	200,178	Feb. 12, 1878	296	88	13	287
Trunk	J. H. Gill	205,633	July 2, 1878	174	52	14	31
Trunk	J. W. Henry	206,730	Aug. 6, 1878	74	24	14	216
Trunk-catch	J. Arnold	205,335	June 25, 1878	985	291	13	1154
Trunk-fixture	C. A. Taylor	203,860	May 21, 1878	679	193	13	925
Trunk-lock	J. Arnold	201,480	Mar. 19, 1878	689	211	13	529
Trunk-lock	W. H. Forker	210,246	Nov. 26, 1878	793	235	14	798
Trunk, Sectional	F. Van Siclen	203,961	May 21, 1878	787	225	13	939
Trunks, Tray-lifter for	A. A. Sola	203,664	May 14, 1878	461	131	13	890
Truss	A. Adamson	200,160	Feb. 12, 1878	279	83	13	284
Truss	D. Deveron and H. Lackmann	204,955	June 18, 1878	579	169	13	1096
Truss	G. France	208,805	Oct. 8, 1878	379	107	14	547
Truss	L. T. J. Lubin	202,842	Apr. 23, 1878	1078	308	13	759
Truss	L. T. J. Lubin	202,843	Apr. 23, 1878	1080	308	13	759
Truss	M. M. Macdonald	204,060	May 21, 1878	891	255	13	952
Truss	A. H. Parker	205,896	July 9, 1878	479	137	14	73
Truss	W. L. Tucker	208,869	Oct. 8, 1878	448	130	14	556
Truss, Abdominal	J. V. Epple	208,079	Sept. 17, 1878	539	161	14	426
Truss and supporter	A. M. Dye	199,424	Jan. 22, 1878	735	216	13	139
Truss, Hernia	H. Loewy	206,117	July 16, 1878	728	209	14	109
Truss, Hernia	D. E. Banks and T. M. Merck	204,281	May 28, 1878	1144	327	13	988
Truss, Hernia	W. L. Tucker	204,775	June 11, 1878	368	110	13	1066
Truss-hoop	C. W. Thompson	199,385	Jan. 22, 1878	698	205	13	132
Tub:							
See Bath-tub.	Wash-tub.						
Butter-tub.							
Tub-car		199,899	Feb. 5, 1878	9	3	13	234
Tube:							
See Boiler-tube.	Railway-tube.						
Cop-tube.	Speaking-tube.						
Paper-tube.	Surgical tube.						
Pile-tube.	Wick-tube.						
Tube-bending apparatus		204,527	June 4, 1878	98	33	13	1026
Tube-cleaner		200,278	Feb. 12, 1878	395	117	13	302
Tube expander and trimmer		200,558	Feb. 19, 1878	685	201 202	13	354
Tubes of plastic material, Apparatus for making		208,792	Oct. 8, 1878	363	103	14	545
Tubing, Armor for flexible		200,493	Feb. 19, 1878	621	183	13	344
Tubing, Armor for flexible		203,094	Apr. 30, 1878	1337	388	13	797
Tubing, Manufacture of metal		204,136	May 28, 1878	992	282	13	969
Tubing, Riveting-machine for		204,419	June 4, 1878	6	2	13	1013
Tubing, Sheet-metal		205,238	June 25, 1878	882	261	13	1141
Tubing upon spindles, Apparatus for placing elastic		201,096	Mar. 12, 1878	280	87	13	465
Tubular boiler		200,873	Mar. 5, 1878	61	21	13	424
Tubular heater		198,766	Jan. 1, 1878	45	12	13	15
Tug and attachment, Harness		199,498	Jan. 22, 1878	806	236	13	150
Tug eye, Hame		205,725	July 9, 1878	298	88	14	50
Tug, Harness		206,331	July 23, 1878	993	282	14	146
Tug-holder, Elastic		199,163	Jan. 15, 1878	469	138	13	89
Tug-link		200,803	Feb. 26, 1878	951	280	13	402
Tug link, Draft		207,904	Sept. 10, 1878	347	105	14	396
Tug, Shaft		206,307	July 23, 1878	963	273	14	113
Tug, Shaft		198,851	Jan. 1, 1878	130	37	13	29
Tug, Spring draft		208,482	Oct. 1, 1878	29	9	14	492
Tug, Spring draft		200,749	Feb. 26, 1878	902	265	13	394
Turbine wheel and gate-operating mechanism		207,076	Aug. 13, 1878	433	134	14	203
Turning tool, Metal		207,562	Aug. 27, 1878	972	285	14	340
Turnstile-register		198,761	Jan. 1, 1878	38	9, 10	13	14
Turnstile-register		206,613	July 30, 1878	1314	378	14	190
Turn-table		204,722	June 11, 1878	310	95	13	1059
Turpentine-scraper		205,601	July 2, 1878	208	62	14	35
Tuyere		205,744	July 9, 1878	317	93	14	52

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Tuyere.....	A. K. Herr.....	203,041	Apr. 30, 1878	1288	373	13	790
Tuyere.....	J. Mackey.....	203,056	Apr. 30, 1878	1290	377	13	792
Tuyere.....	J. F. Maguire.....	202,280	Apr. 9, 1878	447	131	13	666
Tuyere.....	J. S. Miller.....	205,666	July 2, 1878	217	64	14	36
Tuyere.....	T. F. Witherbee.....	198,134	Jan. 8, 1878	425	125	13	82
Twin hook.....	H. H. Cole.....	200,510	Feb. 19, 1878	636	187	13	347
Twine-holder.....	S. C. Catlin.....	207,105	Aug. 20, 1878	483	145	14	274
Twine-holder.....	J. Hill.....	203,913	May 21, 1878	734	211	13	933
Twine-holder.....	J. W. Turner.....	206,984	Aug. 13, 1878	346	106	14	233
Twist drills, Machine for making.....	C. F. Jacobson.....	201,530	Mar. 19, 1878	742	236	13	537
Type.....	J. R. Bettis.....	200,020	Feb. 5, 1878	124	41	13	232
Type.....	C. S. Westcott.....	205,986	July 10, 1878	591	170	14	90
Type-case.....	C. W. Dickinson.....	207,854	Sept. 10, 1878	291	89	14	389
Type-distributing machine.....	J. North.....	211,038	Dec. 17, 1878	748	{ 205 } 206	14	996
Type, Elastic-faced printing.....	A. H. Rogers.....	201,632	Mar. 26, 1878	865	263	13	557
Type-holder.....	L. P. Taylor.....	201,718	Mar. 26, 1878	941	289	13	560
Type, Machine for dressing printing.....	T. Mason.....	207,429	Aug. 27, 1878	825	244	14	332
Type-measure, Printer's.....	T. S. Taylor.....	208,346	Sept. 24, 1878	840	245	14	468
Type-writing machine.....	H. and F. Anderson.....	210,739	Dec. 10, 1878	385	{ 105 } 106	14	882
Type-writing machine.....	E. R. Barron.....	207,002	Aug. 13, 1878	365	112	14	255
Type-writing machine.....	W. J. Barron.....	199,494	Jan. 22, 1878	802	235	13	149
Type-writing machine.....	B. F. Bellows.....	206,100	July 23, 1878	794	{ 227 } 228	14	121
Type-writing machine.....	G. A. Brady and F. F. Warner.....	202,143	Apr. 9, 1878	301	89, 90	13	646
Type-writing machine.....	B. A. Brooks.....	202,923	Apr. 30, 1878	1175	{ 338 } 339	13	775
Type-writing machine.....	J. M. Clough and W. K. Jenne.....	199,263	Jan. 15, 1878	563	{ 165 } 166	13	104
Type-writing machine.....	B. Halstead.....	202,024	Apr. 2, 1878	160	47	13	622
Type-writing machine.....	H. R. M. J. Hansen.....	211,010	Dec. 17, 1878	706	105	14	931
Type-writing machine.....	J. A. Hitter, jr.....	209,684	Nov. 5, 1878	161	47	14	702
Type-writing machine.....	C. L. Sholes.....	199,382	Jan. 22, 1878	695	204	13	132
Type-writing machine.....	C. L. Sholes and C. Glidden.....	200,351	Feb. 12, 1878	473	130	13	314
Type-writing machine.....	C. L. Sholes.....	207,557	Aug. 27, 1878	965	283	14	339
Type-writing machine.....	C. L. Sholes.....	207,558	Aug. 27, 1878	966	283	14	339
Type-writing machine.....	C. L. Sholes.....	207,559	Aug. 27, 1878	967	{ 283 } 284	14	339
Type-writing machine.....	C. T. Ward.....	209,634	Nov. 5, 1878	109	32	14	695
U.							
Ultramarine colors, Manufacture of.....	R. Hoffman.....	202,822	Apr. 23, 1878	1057	.....	13	757
Ultramarine, Manufacture of red.....	J. Zeltner.....	207,093	Aug. 13, 1878	453	.....	13	265
Ultramarine, Manufacture of violet.....	J. Zeltner.....	207,836	Sept. 10, 1878	269	.....	14	386
Umbrella.....	E. Evans.....	198,841	Jan. 1, 1878	118	34	13	27
Umbrella.....	A. G. Kuball.....	207,337	Aug. 27, 1878	752	224	14	313
Umbrella.....	A. Teste, sr.....	208,347	Sept. 24, 1878	841	245	14	468
Umbrella-cases, Machine for eyeleting.....	W. Harnah.....	202,168	Apr. 9, 1878	336	98	13	650
Umbrella-cover.....	G. Held.....	210,121	Nov. 19, 1878	646	192	14	775
Umbrella-frame.....	E. Charagat.....	205,613	July 2, 1878	153	46	14	29
Umbrella-frame.....	W. H. Ogilvie.....	208,200	Sept. 24, 1878	751	220	14	456
Umbrella-holder.....	J. H. Bowers.....	202,140	Apr. 9, 1878	300	88	13	646
Umbrella-holder for vehicles.....	E. Thomas.....	202,385	Apr. 16, 1878	571	167	13	688
Umbrella-ribs, Device for indenting and heading.....	J. McAuliffe.....	210,952	Dec. 17, 1878	639	177	14	923
Umbrella-ribs, Machine for fastening lips upon.....	H. A. Morrison and W. C. Hubbard.....	208,840	Oct. 8, 1878	421	{ 121 } 122	14	532
Umbrella-runner.....	H. S. Frost.....	200,609	Feb. 26, 1878	756	221	13	373
Umbrella-runner.....	A. Good.....	199,638	Jan. 29, 1878	983	286	13	185
Umbrella-runner.....	A. Milliken.....	206,034	July 16, 1878	637	184	14	98
Umbrella-runner.....	A. Rolland and J. Baradel.....	207,898	Sept. 10, 1878	340	103	14	395
Umbrella-runner.....	O. M. Smith.....	210,813	Dec. 10, 1878	463	130	14	893
Umbrella-support.....	A. A. Patterson.....	209,187	Oct. 22, 1878	824	238	14	615
Umbrella-tip cup.....	W. S. Atwood.....	209,598	Nov. 5, 1878	66	19	14	689
Umbrella-tip cup.....	A. Dittrich.....	202,710	Apr. 23, 1878	936	268	13	741
Umbrella-tip cup.....	H. S. Frost.....	199,196	Jan. 8, 1878	501	147	13	94
Under-garment.....	A. A. Danzig.....	202,001	Apr. 2, 1878	138	40	13	619
Underwaist.....	C. B. Robbins.....	206,358	July 23, 1878	1025	293	14	150
Underwear.....	C. L. Bradley.....	199,780	Jan. 29, 1878	1115	{ 327 } 328	13	206
Upholstered surfaces, Edge for.....	G. T. Whiting.....	203,806	May 14, 1878	613	171	13	909
Urn and water-bottom, Combined.....	J. Miller.....	210,207	Nov. 26, 1878	753	223	14	793
Urn, Hot-water.....	N. Kenny.....	208,474	Oct. 1, 1878	21	6	14	491
V.							
Vacuum-brake.....	F. W. Eames.....	208,895	Oct. 15, 1878	486	140	14	565
Vacuum-brake for railway-cars.....	J. and J. G. Hardy.....	199,540	Jan. 22, 1878	855	250	13	157
Valve:							
See Basin-valve.....	Sewer-check valve.....						
Car-ventilator valve.....	Stonch-valve.....						
Hydrant-valve.....	Water-pipe valve.....						
Organ-valve.....	Water-valve.....						
Pump-valve.....	Water-closet valve.....						
Radiator-valve.....	Well-valve.....						
Valve.....	F. Brown.....	202,785	Apr. 23, 1878	1013	291	13	751
Valve.....	W. Henderson.....	205,861	July 9, 1878	442	125	14	69
Valve.....	G. H. Little and J. S. Smart.....	201,352	Mar. 19, 1878	565	173	13	511
Valve.....	J. Patterson.....	208,986	Oct. 15, 1878	582	169	14	578
Valve-action for duplex engines and pumps.....	W. H. Guild, jr.....	206,558	July 30, 1878	1255	361	14	183
Valve, Air.....	J. H. Blessing.....	207,481	Aug. 27, 1878	878	259	14	328
Valve, Air.....	E. A. Wood.....	202,130	Apr. 9, 1878	291	86	13	645
Valve and cock for steam-cylinders, Safety.....	T. J. Paroline.....	203,493	May 7, 1878	269	77	13	857

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Valve, Balanced	G. W. Weinman	209,436	Oct. 29, 1878	1081	{ 314 315 }	{ 14 14 }	655
Valve, Balanced rotary	J. S. Glenn	200,388	Feb. 19, 1878	520	153	13	329
Valve, Balanced slide	F. H. Ball	200,242	Feb. 12, 1878	355	106	13	296
Valve, Balanced slide	R. G. Bishop	201,151	Mar. 12, 1878	337	104	13	472
Valve, Balanced slide	J. C. Bryan	205,723	July 9, 1878	295	87	14	50
Valve, Balanced slide	W. R. Gluyas	205,541	July 2, 1878	82	23	14	19
Valve, Balanced slide	H. M. Hamblin	202,025	Apr. 2, 1878	164	47, 48	13	622
Valve, Balanced steam	J. A. Stephens	208,344	Sept. 24, 1878	838	244	14	467
Valve, Check	J. F. Whitney	200,678	Feb. 26, 1878	829	244	13	384
Valve, Check and safety	T. Duffy	210,706	Dec. 10, 1878	416	115	14	886
Valve, Combined check and slide	J. C. Stead	203,565	May 14, 1878	369	104	13	879
Valve-coupling for vacuum-pipes	W. H. Smith	200,944	Mar. 5, 1878	121	40	13	434
Valve, Feed-water-regulating	E. C. da Silva	208,992	Oct. 15, 1878	587	171	14	579
Valve for barrels, kegs, &c.	J. Byrne	210,608	Dec. 10, 1878	313	85	14	873
Valve for barrels, &c., Self-closing	J. A. Moffitt	207,432	Aug. 27, 1878	828	245	14	322
Valve for compressed-air engines	R. Hardie, J. James, and J. G. Cooper	203,729	May 14, 1878	528	150	13	899
Valve for engines, Piston	R. W. Aitken	204,649	June 11, 1878	232	73	13	1049
Valve for fermented-liquor casks, Safety	H. Shlaudemann	204,687	June 11, 1878	272	84	13	1054
Valve for steam-engines, Balanced	G. A. Harworth	200,718	Feb. 26, 1878	872	256	13	390
Valve for steam-engines, Balanced	F. B. Rice	198,779	Jan. 1, 1878	61	15	13	17
Valve for steam-engines, Balanced	J. C. Wells	204,640	June 4, 1878	215	69	13	1043
Valve for steam-engines, Oscillating	R. H. D. Morrison	198,916	Jan. 1, 1878	201	57	13	30
Valve for steam-engines, Throttle	W. J. Innis	210,854	Dec. 17, 1878	516	146	14	938
Valve for water-tanks, &c., Diaphragm	H. H. Craigie	209,867	Nov. 12, 1878	364	109	14	733
Valve, Gate	E. Alt	210,738	Dec. 10, 1878	384	105	14	882
Valve-gear	D. O. Ladd	207,607	Sept. 3, 1878	23	8	14	352
Valve-gear	C. Prött	205,208	June 25, 1878	847	251	13	1136
Valve-gear, Engine	C. Brown	202,222	Apr. 9, 1878	388	113	13	658
Valve-gear, Engine	A. Collmann	203,534	May 14, 1878	334	95	13	875
Valve-gear, Engine	R. Hardie, J. James, and J. G. Cooper	209,474	Oct. 29, 1878	1118	326	14	660
Valve-gear, Engine	L. C. Mason	204,351	May 28, 1878	1218	347	13	997
Valve-gear, Engine	F. Ogden	205,759	July 9, 1878	333	97	14	55
Valve-gear, Engine	B. P. Perry	210,353	Nov. 26, 1878	913	267	14	813
Valve-gear, Engine	E. Sprague	210,059	Nov. 19, 1878	577	173	14	766
Valve-gear, Steam-engine	J. Butcher	209,013	Oct. 15, 1878	616	179	14	582
Valve-gear, Steam-engine	C. A. Smith	203,662	May 14, 1878	459	131	13	890
Valve-gear, Steam-engine	E. Williams	200,368	Feb. 12, 1878	493	145	13	317
Valve-gear, Steam-engine	G. W. Zeigler	200,639	Feb. 26, 1878	786	231	13	378
Valve-gearing, Steam-engine	J. Everding	203,128	Apr. 30, 1878	1370	399	13	802
Valve, Globe	H. R. Corkhill	209,382	Oct. 29, 1878	1027	298	14	647
Valve, Globe	G. Pierce	209,200	Oct. 22, 1878	919	268	14	628
Valve-grinder	J. H. Phelan	210,433	Dec. 3, 1878	44	10	14	829
Valve, Locking	P. Connolly	206,228	July 23, 1878	869	248	14	131
Valve-motion link	S. Hamblin	202,166	Apr. 9, 1878	333	98	13	650
Valve, Oscillating steam	C. J. Van Depocle	207,463	Aug. 27, 1878	863	255	14	326
Valve, Overflow	W. A. Pitt	199,101	Jan. 8, 1878	386	115	13	77
Valve, Piston	W. C. Ross	199,865	Jan. 29, 1878	1195	351	13	218
Valve, Puppet	H. F. Frisbie	204,018	May 21, 1878	851	243	13	947
Valve, Rotary	D. W. Jones	200,728	Feb. 26, 1878	882	259	13	391
Valve, Rotary	F. M. Stevens	205,982	July 16, 1878	588	169	14	92
Valve, Safety	H. G. Ashton	200,119	Feb. 12, 1878	239	73	13	279
Valve, Safety	F. Lunkenheimer	206,589	July 30, 1878	1289	371	14	187
Valve, Safety	F. W. Richardson	207,820	Sept. 10, 1878	249	78	14	384
Valve-seat for steam-cylinders	H. Watkeys	210,279	Nov. 26, 1878	827	244	14	602
Valve, Self-closing	C. F. Murdock	209,503	Oct. 29, 1878	1148	335	14	665
Valve, Service	P. Magnus	190,079	Jan. 8, 1878	365	108	13	73
Valve, Slide	H. G. Ludlow and J. Ward	208,687	Oct. 8, 1878	250	71	14	530
Valve, Slide	J. Streily	209,305	Oct. 22, 1878	935	272	14	630
Valve, Slide and steam	G. W. Dixon	205,788	July 9, 1878	366	106	14	58
Valve, Slide and steam	J. E. Schultz	204,617	June 4, 1878	197	63	13	1040
Valve, Steam	J. Saunders	203,947	May 21, 1878	773	221	13	938
Valve, Steam	G. Stringer and T. Francis	205,007	June 18, 1878	630	185	13	1102
Valve, Steam	C. C. Walworth	206,373	July 23, 1878	1044	300	14	152
Valve, Steam-engine	E. Cope and J. R. Maxwell	200,855	Mar. 5, 1878	41	15	13	421
Valve, Steam-engine	E. Cope and J. R. Maxwell	202,933	Apr. 30, 1878	1133	341	13	777
Valve, Steam-engine slide	C. M. Miller	206,398	July 30, 1878	1087	311	14	162
Valve, Stop	J. F. Fifield	199,814	Jan. 29, 1878	1150	338	13	211
Valve, Stop	J. S. Glenn	208,808	Oct. 8, 1878	381	108	14	547
Valve, Stop	J. O. Morse	207,365	Aug. 27, 1878	758	226	14	314
Valve, Stop	R. J. Thomas	208,214	Sept. 17, 1878	686	202	14	445
Valve, Stop	W. E. Worthen and R. S. Gillespie	202,319	Apr. 9, 1878	488	143	13	672
Valve, Tap	M. Walz	210,227	Nov. 26, 1878	773	229	14	795
Valve, Universal globe	T. F. Rowland	199,936	Feb. 5, 1878	49	16	13	240
Valve-yokes, Apparatus for forming	J. A. Hodel	208,600	Oct. 1, 1878	146	42, 43	14	598
Vapor-bath	C. Jansen	200,916	Mar. 5, 1878	97	33	13	430
Vapor-bath	C. A. Munro	204,500	June 4, 1878	75	26	13	1023
Vapor-bath apparatus	G. W. Carpenter	207,249	Aug. 20, 1878	629	188	14	292
Vaporizer, Steam	W. O. Smith	200,154	Feb. 12, 1878	270	81	13	283
Varnish	C. J. and C. Breidbach	206,070	July 16, 1878	681	.....	14	104
Varnish	J. W. Hyatt	209,570	Nov. 5, 1878	38	.....	14	686
Varnish	M. Mackay	209,176	Oct. 22, 1878	813	.....	14	613
Varnishing-machine	G. Burns	200,894	Mar. 5, 1878	76	27	13	427
Varnishing-machine	T. B. Dooley	199,625	Jan. 29, 1878	970	282	13	183
Varnishing-machine	T. B. Dooley	205,367	June 25, 1878	1019	302	13	1158
Varnishing-machine	J. Spencer	206,276	July 23, 1878	925	262	14	138
Vase, Flower	F. Ratcliff	203,939	May 21, 1878	760	219	13	936
Vat: See Cheese-vat.	Wort-cooling vat.						
Vat	C. Visel	200,586	Feb. 19, 1878	713	210	13	358
Vault	E. Harkness	201,413	Mar. 19, 1878	626	191	13	520
Vault, Ash and garbage	M. Samelson	201,202	Mar. 12, 1878	382	118	13	480
Vault-cover	E. P. Hoyt	205,866	July 9, 1878	447	127	14	69



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Vault-light, Ventilating	J. M. Willbur	208,552	Oct. 1, 1878	94	28	14	501
Vault, Portable burial	J. Chittock	198,872	Jan. 1, 1878	152	44	13	32
Vegetable-chopper	T. Leonard	207,748	Sept. 3, 1878	168	51	14	370
Vegetable-cutter	J. H. Boyle	203,883	May 21, 1878	699	200	13	9-8
Vegetable-cutter	G. M. Clark	210,098	Nov. 12, 1878	624	185	14	771
Vegetable-cutter	H. E. Hewitt	203,453	May 7, 1878	231	66	13	852
Vegetable-cutter	J. F. Rote	200,668	Feb. 26, 1878	817	240	13	382
Vegetable-cutter	A. Seneff and A. Hoeffer	203,078	Apr. 30, 1878	1322	384	13	795
Vegetable-cutter	J. Weatherbee and I. Mowder	205,223	June 25, 1878	864	255	13	1138
Vegetable-slicer	N. Edwards	205,621	July 2, 1878	162	48	14	30
Vehicle	J. C. Russell	210,561	Dec. 3, 1878	187	50	14	847
Vehicle-axle	G. W. Henderson	204,435	June 4, 1878	20	7	13	1015
Vehicle-axle, Machine for upsetting collars on	J. C. Richardson	207,208	Aug. 20, 1878	585	175	14	286
Vehicle-body	K. A. Hughson	199,548	Jan. 22, 1878	863	252	13	159
Vehicle-brake	J. A. Kirby	205,872	July 9, 1878	455	129	14	70
Vehicle-brake	C. R. Rice	201,893	Apr. 2, 1878	34	10	13	603
Vehicle-brake	C. T. Warren	205,707	July 2, 1878	260	78	14	41
Vehicle-clip	D. Kirk	200,795	Feb. 26, 1878	943	278	13	401
Vehicle-coupling	S. W. Baldwin	210,743	Dec. 10, 1878	390	107	14	883
Vehicle-gear	J. J. Gallagher	202,164	Apr. 9, 1878	332	97	13	679
Vehicle-gear	S. H. Preston	201,829	Mar. 26, 1878	1055	322	13	586
Vehicle, Hand-power	A. Lewis	204,674	June 11, 1878	257	80	13	1032
Vehicle jump-seat	H. C. Winger and W. W. Stough	204,932	June 18, 1878	558	162	13	1093
Vehicle, Passenger	M. V. Nichols	210,955	Dec. 17, 1878	643	178	14	924
Vehicle platform-gear	J. Bryant	207,942	Sept. 10, 1878	388	117	14	401
Vehicle running-gear	J. Bowman	202,142	Apr. 9, 1878	300	89	13	646
Vehicle running-gear	H. V. Caton	201,150	Mar. 12, 1878	344	106	13	473
Vehicle running-gear	J. A. Hinson	201,013	Mar. 5, 1878	192	61	13	445
Vehicle running-gear	P. Letalle	204,343	May 28, 1878	1209	345	13	996
Vehicle running-gear	I. H. Mulford	200,872	Mar. 5, 1878	60	21	13	424
Vehicle running-gear	J. N. Whipple	205,595	July 2, 1878	124	41	14	28
Vehicle running-gear	G. Wilkes	204,868	June 11, 1878	469	136	13	1077
Vehicle sand-band	J. B. Winchell and J. W. Hanser	208,658	Oct. 1, 1878	209	60	14	517
Vehicle-seat	T. J. Hickey	199,545	Jan. 22, 1878	861	251	13	158
Vehicle-seat	A. Y. Hubbell	208,820	Oct. 8, 1878	392	111	14	548
Vehicle-seat	T. K. Meech	207,193	Aug. 20, 1878	570	171	14	244
Vehicle seat-lock	W. B. Allen	208,136	Sept. 17, 1878	603	178	14	435
Vehicle seat-lock	D. Kirk	204,234	May 28, 1878	1099	314	13	982
Vehicle-seat-spring fastening	R. H. Guyer	205,078	June 18, 1878	699	207	13	1112
Vehicle-seats, Spring-back for	E. Wilson	200,960	Mar. 5, 1878	135	44	13	436
Vehicle shifting-rail	E. Miller	210,620	Dec. 10, 1878	202	71	14	867
Vehicle shifting-seat	J. A. Hawthorn	210,031	Nov. 19, 1878	550	165	14	761
Vehicle, Side-bar	J. Kauffman	204,154	May 28, 1878	1014	288	13	971
Vehicle side-spring	J. Foster	204,553	June 4, 1878	119	41	13	1020
Vehicle side-spring	R. Porter	211,045	Dec. 17, 1878	761	209	14	937
Vehicle, Side-spring	P. F. Milligan and J. F. Wood	202,741	Apr. 23, 1878	967	278	13	745
Vehicle, Side-spring	W. L. Weson	202,904	Apr. 23, 1878	1143	328	13	767
Vehicle, Side-spring	A. Wood	203,977	May 21, 1878	802	230	13	941
Vehicle-spring	J. Batt	202,506	Apr. 16, 1878	684	201	13	704
Vehicle-spring	L. J. Bazzoni	199,016	Jan. 8, 1878	306	90	13	61
Vehicle-spring	J. Bowman	204,707	June 11, 1878	293	91	13	1057
Vehicle-spring	M. E. Burris	200,169	Feb. 12, 1878	288	86	13	246
Vehicle-spring	W. Chagwin	206,862	Aug. 13, 1878	227	72	14	239
Vehicle-spring	D. F. Cooper	200,435	Feb. 19, 1878	565	166	13	336
Vehicle-spring	L. A. and A. L. Davis	210,925	Dec. 17, 1878	611	169	14	9-0
Vehicle-spring	J. Enders	202,341	Apr. 16, 1878	530	155	13	682
Vehicle-spring	C. W. Fillmore	208,901	Oct. 15, 1878	492	142	14	566
Vehicle-spring	B. F. Fuller	207,511	Aug. 27, 1878	917	269	14	353
Vehicle-spring	S. Gilzinger	204,556	June 4, 1878	124	42	13	1030
Vehicle-spring	F. Gerard	209,247	Oct. 22, 1878	877	255	14	623
Vehicle-spring	J. Glenn	206,557	July 30, 1878	1254	361	14	181
Vehicle-spring	R. H. Guyer	206,438	July 30, 1878	1128	323	14	167
Vehicle-spring	H. R. Huie	208,977	Oct. 15, 1878	575	167	14	577
Vehicle-spring	G. Judd	207,423	Aug. 27, 1878	821	243	14	322
Vehicle-spring	S. D. King	210,785	Dec. 10, 1878	434	121	14	889
Vehicle-spring	J. Krebbs	210,260	Nov. 26, 1878	806	239	14	800
Vehicle-spring	I. M. Linderman	209,695	Nov. 5, 1878	173	51	14	704
Vehicle-spring	W. McCord	200,072	Feb. 5, 1878	182	58	13	261
Vehicle-spring	W. Michael	202,851	Apr. 23, 1878	1087	310	13	760
Vehicle-spring	G. P. Muldoon and E. P. Davis	202,858	Apr. 23, 1878	1094	313	13	761
Vehicle-spring	N. Nilson	204,360	May 28, 1878	1229	350	13	999
Vehicle-spring	S. Palmatter	210,142	Nov. 19, 1878	609	199	14	778
Vehicle-spring	H. W. Fell	200,333	Feb. 12, 1878	454	134	13	310
Vehicle-spring	S. M. Richardson	204,915	June 18, 1878	539	157	13	1090
Vehicle-spring	C. W. Saladee	209,426	Oct. 29, 1878	1070	310	14	651
Vehicle-spring	C. N. Schofield	200,877	Mar. 5, 1878	64	22	13	425
Vehicle-spring	C. F. Shoemaker	209,988	Nov. 19, 1878	501	152	14	101
Vehicle-spring	F. J. Springer	206,050	July 16, 1878	654	189	14	115
Vehicle-spring	G. Stricker	199,329	Jan. 15, 1878	633	184	13	813
Vehicle-spring	G. Stricker	203,212	Apr. 30, 1878	1464	428	13	813
Vehicle-spring	G. Stricker	203,213	Apr. 30, 1878	1465	428	13	813
Vehicle-spring	J. T. Thompson	203,508	May 7, 1878	282	81	13	850
Vehicle-spring	J. Thornton	203,567	May 14, 1878	370	104	13	879
Vehicle-spring	W. W. Wills	202,390	Apr. 16, 1878	375	169	13	688
Vehicle-spring	D. G. Wyeth	208,452	Sept. 24, 1878	951	279	14	485
Vehicle spring and axle	S. W. Ludlow	204,589	June 4, 1878	161	52	13	1055
Vehicle spring-brace	A. Elliott	203,330	May 7, 1878	99	29	13	853
Vehicle spring-brace	E. R. Wheeler	205,594	July 2, 1878	134	40	14	26
Vehicle spring-clip	J. Bowden	207,005	Aug. 13, 1878	368	113	14	255
Vehicle spring-coupling	W. F. Whitney	210,385	Nov. 26, 1878	930	276	14	818
Vehicle spring-equalizer	D. C. Markham	198,948	Jan. 8, 1878	238	68	13	52
Vehicle spring-seat	J. T. Yerkes	204,411	May 28, 1878	1278	365	13	1005



*Alphabetical list of inventions—Continued.*

Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Vehicle-spring support.....	J. C. Leathers.....	207,533	Aug. 27, 1878	939	276	14	336
Vehicle-springs, jointed brace for.....	W. J. Rawlings.....	204,843	June 11, 1878	443	139	13	1074
Vehicle-springs, Rubber cushion for.....	W. B. West.....	199,886	Jan. 29, 1878	1215	357	13	221
Vehicle-top.....	T. E. and J. H. Hayes.....	203,450	May 7, 1878	228	65	13	851
Vehicle-top.....	D. Jannopoulos.....	205,098	June 18, 1878	719	214	13	1114
Vehicle-top.....	J. Kuntz and S. F. Schroeder.....	203,743	May 14, 1878	544	154	13	901
Vehicle-top.....	S. R. Owen and F. M. Mahan.....	201,824	Mar. 26, 1878	1049	{ 320 321 }	{ 13 13 }	{ 585 585 }
Vehicle-top, Adjustable.....	A. Bowers.....	208,564	Oct. 1, 1878	112	32	14	504
Vehicle-top adjuster.....	L. Everett.....	202,937	Apr. 30, 1878	1188	342	13	777
Vehicle-top adjuster.....	C. W. Grinnell and F. Bulckens.....	203,726	May 14, 1878	526	149	13	898
Vehicle-top adjuster.....	J. Lamson and J. Brotherton.....	205,104	June 18, 1878	724	215	13	1115
Vehicle torsion-spring.....	W. H. Brace.....	199,256	Jan. 15, 1878	555	163	13	102
Vehicle torsion-spring.....	F. M. Chapin and J. Gersbacher.....	206,703	Aug. 6, 1878	48	15	14	212
Vehicle torsion-spring.....	W. Evans and W. H. Sparks.....	199,810	Jan. 29, 1878	1147	337	13	211
Vehicle dash-rod.....	F. J. Derrig.....	210,600	Dec. 10, 1878	238	65	14	864
Vehicle-wheel.....	T. Brown.....	209,856	Nov. 12, 1878	354	106	14	732
Vehicle-wheel.....	T. Burnett.....	202,225	Apr. 9, 1878	390	114	13	658
Vehicle-wheel.....	C. S. Carpenter.....	207,012	Aug. 13, 1878	373	115	14	256
Vehicle-wheel.....	C. Deaderick.....	201,873	Apr. 2, 1878	16	4	13	601
Vehicle-wheel.....	J. L. Dudley.....	205,845	July 9, 1878	426	121	14	66
Vehicle-wheel.....	J. W. Harris.....	206,442	July 30, 1878	1134	325	14	168
Vehicle-wheel.....	A. C. Hendricks.....	201,783	Mar. 26, 1878	1011	309	13	580
Vehicle-wheel.....	T. H. King.....	202,271	Apr. 9, 1878	437	127	13	664
Vehicle-wheel.....	J. H. Moss.....	199,563	Jan. 22, 1878	875	256	13	161
Vehicle-wheel.....	J. Raddin.....	200,088	Feb. 5, 1878	200	63	13	264
Vehicle-wheel.....	W. Thunen.....	205,318	June 25, 1878	965	286	13	1152
Vehicle-wheel.....	C. O. Wilder.....	205,161	June 18, 1878	785	233	13	1123
Vehicle-wheel sand-band.....	C. Breed.....	203,239	May 7, 1878	3	1	18	821
Vehicle-wheel sand-guard.....	W. Stuart and D. J. Parker.....	199,668	Jan. 29, 1878	1014	295	13	190
Vehicles, Adjustable sleigh-shoes for wheeled.....	W. J. Westwood.....	207,923	Sept. 10, 1878	366	111	10	398
Vehicles, Brake for light.....	C. H. Weiss.....	200,956	Mar. 5, 1878	132	43	13	436
Vehicles, Endless-track wheel for.....	A. Brosius.....	209,451	Oct. 29, 1878	1097	319	14	657
Vehicles, Platform-spring for.....	E. R. Fitch.....	209,755	Nov. 12, 1878	245	74	14	718
Vehicles, Spring-bottom for.....	E. D. Cramer.....	203,597	May 14, 1878	396	112	13	882
Velocipede.....	H. Ackermann.....	205,330	June 25, 1878	980	290	13	1153
Velocipede.....	G. W. Bishop.....	207,240	Aug. 20, 1878	617	185	14	290
Velocipede.....	A. M. Buchanan.....	199,409	Jan. 22, 1878	722	212	13	136
Velocipede.....	J. A. Crandall.....	199,518	Jan. 22, 1878	830	243	13	154
Velocipede.....	E. N. Higley.....	201,179	Mar. 12, 1878	360	111	13	476
Velocipede.....	J. H. Hollweg.....	206,020	July 16, 1878	623	180	14	96
Velocipede.....	H. F. Parsons.....	202,665	Apr. 23, 1878	891	255	13	736
Velocipede.....	J. B. Root.....	210,435	Dec. 3, 1878	46	11	14	830
Velocipede.....	A. Q. Ross.....	210,271	Nov. 26, 1878	818	242	14	801
Velocipede.....	S. R. Scharf.....	202,656	Apr. 2, 1878	194	57	13	626
Velocipede.....	G. Stafford.....	205,921	July 9, 1878	508	144	14	77
Velocipede.....	R. Steel.....	208,861	Oct. 8, 1878	440	127	14	555
Velocipede.....	O. Unzicker.....	204,636	June 4, 1878	212	68	13	1042
Velocipede.....	S. P. Watt.....	203,968	May 21, 1878	793	227	14	940
Velocipede, Ice.....	V. A. Menuez.....	201,265	Mar. 12, 1878	453	140	13	489
Velocipede-propeller.....	J. A. Zoehl.....	208,876	Oct. 8, 1878	456	132	14	557
Velocipede-sled.....	W. H. Upton.....	209,367	Oct. 29, 1878	1014	295	14	645
Velocipede, Water.....	W. D. Moore.....	206,346	July 23, 1878	1013	289	14	149
Veneer-cutter.....	J. A. Waterman.....	210,171	Nov. 19, 1878	699	208	14	782
Veneer-cutting machine.....	L. Anderson.....	205,230	June 25, 1878	871	258	13	1139
Veneer-cutting machine.....	C. T. Fairchild.....	200,996	Mar. 5, 1878	175	56	13	442
Veneer-cutting machine.....	T. Hanvey.....	205,382	June 25, 1878	1034	306	13	1160
Veneer-cutting machine.....	J. D. McEachren.....	200,467	Feb. 19, 1878	596	176	13	341
Veneer-cutting machine.....	H. S. Smith.....	207,628	Sept. 3, 1878	44	14	14	354
Vent for barrels and kegs.....	W. Thomas.....	210,821	Dec. 10, 1878	470	133	14	894
Vent spike and valve for beer-barrels.....	P. Mussbauer.....	209,504	Oct. 29, 1878	1150	335	14	665
Ventilating greenhouses.....	L. Brecht.....	209,854	Nov. 12, 1878	352	105	14	732
Ventilating railway-cars and ships.....	J. M. Keating.....	199,554	Jan. 22, 1878	868	254	13	160
Ventilating ships.....	B. F. Delano.....	203,005	Apr. 30, 1878	1251	362	13	786
Ventilating ships.....	A. F. Yarrow.....	207,335	Aug. 20, 1878	711	{ 212 213 }	{ 14 14 }	{ 303 303 }
Ventilating water-closets.....	W. Pickhardt.....	209,511	Oct. 29, 1878	1160	337	14	666
Ventilation, Machine for producing.....	C. Schleicher and J. and J. Mackert.....	208,855	Oct. 8, 1878	432	{ 125 126 }	{ 14 14 }	{ 554 554 }
Ventilation, System of.....	J. Burt.....	209,455	Oct. 29, 1878	1101	320	14	658
Ventilator: See Car-ventilator. Millstone-ventilator. Chimney-ventilator. Stove-pipe ventilator. Corn-crib ventilator. Water-power closet-ventilator. Grain-ventilator. Window-ventilator. House-ventilator. Window-ventilator. Louver-ventilator.							
Ventilator.....	I. W. Canfield, jr., and C. H. Denarest.....	200,255	Feb. 12, 1878	371	109	13	298
Ventilator.....	H. M. Farnam.....	199,426	Jan. 22, 1878	736	217	13	139
Ventilator.....	C. M. Handover.....	203,447	May 7, 1878	226	64	13	851
Ventilator.....	T. Owens.....	209,072	Oct. 15, 1878	685	198	14	591
Ventilator.....	T. Owens.....	209,506	Oct. 29, 1878	1153	{ 335 336 }	{ 14 14 }	{ 665 665 }
Ventilator.....	N. A. Penland.....	202,960	Apr. 30, 1878	1210	349	13	780
Ventilator.....	J. E. Richard.....	205,418	June 25, 1878	1068	316	13	1165
Ventilator.....	S. Seabury.....	202,968	Apr. 30, 1878	1219	352	13	781
Ventilator.....	E. G. Sternberg.....	210,722	Dec. 10, 1878	369	101	14	880
Ventilator.....	S. S. Thompson.....	204,264	May 28, 1878	1128	323	13	986
Ventilator.....	A. Unger.....	207,373	Aug. 27, 1878	765	228	14	315
Ventilator.....	W. D. Young.....	208,554	Oct. 1, 1878	96	28	14	502
Ventilator and chimney-cap.....	J. Walker.....	199,599	Jan. 22, 1878	915	268	13	167
Ventilator and chimney-top.....	W. F. Rossman.....	205,141	June 18, 1878	763	226	13	1120
Ventilator for blow and dust rooms.....	J. B. Holmes.....	206,949	Aug. 13, 1878	313	95	14	248
Ventilator for mines, cellars, and buildings.....	J. C. Morgan.....	199,091	Jan. 8, 1878	378	112	13	75

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Ventilator or smoke-cowl.....	R. S. Godfrey.....	201,241	Mar. 12, 1878	428	131	13	486
Vertical mill, Double.....	J. Weimer.....	201,854	Mar. 26, 1878	1081	328 329	13	589
Vessel, Compartment.....	J. Butcher.....	202,701	Apr. 23, 1878	929	265	13	740
Vessel-hulls, Apparatus for cleansing.....	C. Fielder.....	205,791	July 9, 1878	369	106 107	14	50
Vessel-loading apparatus.....	N. C. Gielstrup and I. A. Field.....	203,334	May 7, 1878	102	30	14	634
Vessels, &c., Apparatus for cleaning hulls of.....	H. J. Cole.....	200,696	Feb. 26, 1878	847	249	13	586
Vessels, &c., Apparatus for loading and unloading.....	W. Fields and D. Kerbaugh.....	207,803	Sept. 10, 1878	233	73	14	382
Vessels, Apparatus for unloading sand, grain, &c., from.....	C. J. Wells.....	207,229	Aug. 20, 1878	606	182	14	229
Vessels, Armor for.....	E. W. Serrell.....	210,811	Dec. 10, 1878	461	129	14	882
Vessels, Construction of.....	B. F. Delano.....	207,505	Aug. 27, 1878	905	267	14	332
Vessels, Construction of hulls of steam.....	R. C. Brown.....	203,586	May 14, 1878	386	109	13	681
Vessels, Machine for unloading grain from.....	C. J. Wells.....	209,204	Oct. 22, 1878	840	242	14	617
Vessels, Pin-rail for.....	T. W. Hyde.....	200,613	Feb. 26, 1878	759	222	13	373
Vessels, Roll and pitch indicator for.....	R. Chandler.....	204,133	May 28, 1878	989	281	13	968
Vessels, Sheathing.....	B. L. Thomson and T. Connolly.....	207,997	Sept. 10, 1878	444	133	14	409
Vest and suspenders combined.....	L. Paulson.....	203,066	Apr. 30, 1878	1310	380	13	752
Vest, Chest-protecting.....	G. F. Jackson.....	200,003	Feb. 5, 1878	173	56	13	200
Vest of paper and other material.....	F. C. Weber and F. Kruse.....	200,417	Feb. 19, 1878	547	162	13	333
Victorine.....	I. Pick.....	208,034	Sept. 17, 1878	498	148	14	420
Vinegar and aging liquors, Apparatus for making.....	A. Graham.....	209,615	Nov. 5, 1878	85	25	14	692
Vinegar, Apparatus for making.....	J. C. Appenzeller.....	203,574	May 14, 1878	375	106	13	880
Vinegar-generator.....	J. B. Netscher.....	199,854	Jan. 29, 1878	1186	348	13	217
Violin.....	P. N. Jacobus.....	208,017	Sept. 17, 1878	478	143	14	418
Violin-case.....	L. Menger.....	208,409	Sept. 24, 1878	901	264	14	476
Violin, Piano.....	F. Harris.....	210,028	Nov. 19, 1878	547	164	14	761
Vise.....	E. P. Cook and J. F. Hall.....	199,517	Jan. 22, 1878	829	242	13	153
Vise.....	T. E. Dutton.....	207,349	Aug. 27, 1878	745	222	14	312
Vise.....	W. Starkey.....	200,101	Feb. 5, 1878	211	66	13	266
Vise.....	W. X. Stevens.....	209,142	Oct. 22, 1878	778	226	14	606
Vise, Bench.....	A. P. Thompson.....	200,848	Mar. 5, 1878	35	12	13	420
Vise, Calking.....	P. Rickard and A. C. La Brash.....	206,615	July 30, 1878	1315	378	14	190
Vise, Carpenter's.....	E. H. Brower.....	205,239	June 25, 1878	882	261	13	1141
Vise, Hand.....	B. F. Stephens.....	205,434	June 25, 1878	1082	321	13	1167
Vise, Harness-cutter's.....	W. P. Worthington.....	209,438	Oct. 20, 1878	1084	315	14	635
Vise, Hollow-screw pin.....	J. Parmelee.....	207,720	Sept. 3, 1878	35	12	14	333
Vise, Pipe and rod.....	O. Breckenridge.....	201,591	Mar. 26, 1878	821	250	13	551
Vise, Standing bench.....	J. K. B. Solomon.....	210,473	Dec. 3, 1878	87	22	14	635
Vise, wrench, and pincers combined.....	D. F. Brown, sr.....	203,701	May 14, 1878	501	142	13	895
Vocal engine.....	T. A. Edison.....	210,767	Dec. 10, 1878	416	115	14	86
Vulcanized compounds, Combination of vegetable oils and grahamite for the manufacture of.....	A. G. Day.....	210,405	Dec. 3, 1878	15	.....	14	827
Vulcanizing rubber tubes.....	M. Mattson.....	209,128	Oct. 22, 1878	763	221	14	607
W.							
Wagon-axle.....	P. R. Walsh.....	205,591	July 2, 1878	132	40	14	26
Wagon-axles, Manufacture of.....	T. Graser.....	209,883	Nov. 12, 1878	379	113	14	736
Wagon-body.....	J. H. Paschal.....	200,700	Nov. 5, 1878	186	55	14	706
Wagon-bolster.....	J. Eymann.....	206,710	Aug. 6, 1878	54	17	14	213
Wagon-bolster-plate.....	S. S. Crocker and A. Wilcox.....	201,833	Mar. 19, 1878	543	167	13	569
Wagon-bolster-spring.....	H. J. Gago.....	210,516	Dec. 3, 1878	134	36	14	641
Wagon-box fastening.....	C. G. Conkling.....	200,698	Feb. 20, 1878	849	250	13	387
Wagon-brake.....	R. D. Adams.....	200,887	Mar. 5, 1878	71	25	13	426
Wagon-brake.....	E. A. Barlow.....	199,176	Jan. 15, 1878	481	142	13	91
Wagon-brake.....	W. T. Burrows.....	205,835	July 9, 1878	418	118	14	65
Wagon-brake.....	A. R. Cushman.....	203,247	May 7, 1878	11	4	13	822
Wagon-brake.....	W. G. Tink.....	207,171	Aug. 20, 1878	545	163	14	281
Wagon-brake.....	S. Gorr.....	200,051	Feb. 5, 1878	161	52	13	258
Wagon-brake.....	F. A. Keene and C. Van Order.....	201,423	Mar. 19, 1878	635	194	13	521
Wagon-brake.....	W. M. Rape.....	209,291	Oct. 22, 1878	921	268	14	628
Wagon-brake.....	P. Smith.....	207,824	Sept. 10, 1878	255	80	14	385
Wagon-brake.....	C. F. Whipple.....	210,442	Dec. 3, 1878	54	13	14	631
Wagon-brake.....	G. M. Wilson.....	201,856	Mar. 20, 1878	1085	330	13	590
Wagon-brake.....	I. S. Wright.....	209,999	Nov. 19, 1878	518	156	14	757
Wagon-brake, Automatic.....	W. L. Collins.....	204,540	June 4, 1878	109	37	13	1028
Wagon-brake, Automatic.....	J. G. Hart.....	210,030	Nov. 19, 1878	549	164	14	761
Wagon-brake, Automatic.....	L. Johannesen.....	200,308	Feb. 12, 1878	426	126 127	13	396
Wagon-brake, Automatic.....	G. Kemmel.....	205,396	June 25, 1878	1048	310	13	1162
Wagon-brake, Automatic.....	S. S. Miller.....	200,472	July 30, 1878	1165	334	14	172
Wagon-brake, Automatic.....	L. L. Travis.....	203,093	Apr. 30, 1878	1336	388	13	797
Wagon-brake, Automatic.....	W. P. Wood.....	206,063	July 16, 1878	667	193	14	192
Wagon-brake lever.....	C. W. Boettner.....	206,415	July 30, 1878	1105	316	14	164
Wagon-brake lever.....	T. C. Lawrence.....	202,857	Apr. 16, 1878	759	219	13	712
Wagon-coupling.....	W. R. Porter.....	199,860	Jan. 29, 1878	1191	350	13	217
Wagon-cover.....	C. H. Cutler.....	205,248	June 25, 1878	890	263	13	1142
Wagon-cover.....	D. Jannopoulos.....	205,099	June 18, 1878	720	214	13	1114
Wagon-cover, Reversible.....	J. Boyle.....	210,662	Dec. 10, 1878	309	84	14	872
Wagon, Dumping.....	H. Bailey.....	209,745	Nov. 12, 1878	238	71	14	717
Wagon, Dumping.....	M. Budge.....	203,588	May 14, 1878	387	110	13	681
Wagon, Dumping.....	C. F. Dinkle and C. R. Woodward.....	200,265	Feb. 12, 1878	383	113	13	300
Wagon, Dumping.....	J. Giles.....	206,433	July 30, 1878	1124	322	14	167
Wagon, Dumping.....	J. W. Harrison.....	209,341	Oct. 29, 1878	984	286	14	640
Wagon, Dumping.....	J. H. Nelson.....	202,745	Apr. 23, 1878	971	279	13	746
Wagon, Dumping.....	L. Rodenhausen.....	211,052	Dec. 17, 1878	767	210	14	938
Wagon, Dumping.....	G. F. Weymouth.....	208,352	Sept. 24, 1878	844	246	14	468
Wagon-gear.....	J. H. Durand.....	208,381	Sept. 24, 1878	873	254	14	472
Wagon-gear.....	O. S. Gorton.....	211,006	Dec. 17, 1878	702	193	14	630
Wagon-gear and brake.....	J. J. Pennington.....	200,474	Feb. 19, 1878	603	177	13	342
Wagon-gearing and tongue-support.....	C. Baumgartner.....	200,641	Feb. 26, 1878	788	231	13	378
Wagon-hound.....	J. Q. Adams.....	206,913	Aug. 13, 1878	282	86	14	245
Wagon-jack.....	J. J. Adgate.....	206,516	July 30, 1878	1213	348	14	178

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Wagon-jack	W. B. Bartram	209,015	Oct. 15, 1878	619	179	14	582
Wagon-jack	M. C. Flanders	200,044	Feb. 5, 1878	155	50	13	257
Wagon-jack	I. J. Hart	205,796	July 9, 1878	376	108	14	60
Wagon-jack	H. Hiestand, jr.	206,944	Aug. 13, 1878	309	94	14	248
Wagon-jack	M. J. Hurd	201,529	Mar. 19, 1878	741	226	13	537
Wagon-jack	H. H. Margeson	210,948	Dec. 17, 1878	635	176	14	923
Wagon-jack	R. W. Marshall	207,363	Aug. 27, 1878	757	226	14	314
Wagon-jack	J. B. Newland	206,746	Aug. 6, 1878	90	29	14	218
Wagon-jack	W. A. Pierson	206,481	July 30, 1878	1176	337	14	173
Wagon-jack	S. Smith	201,459	Mar. 19, 1878	669	204	13	526
Wagon-jack	M. D. Williams and W. H. Dodge	208,940	Oct. 15, 1878	534	157	14	571
Wagon-lock	G. F. Burton	209,547	Nov. 5, 1878	9	3, 4	14	682
Wagon-rack	C. E. Adamson	205,518	July 2, 1878	57	17	14	16
Wagon-rack	L. Talcott	210,820	Dec. 10, 1878	469	132	14	894
Wagon, Road	C. W. Saladee	210,635	Dec. 10, 1878	279	76	14	869
Wagon, Road	C. W. Saladee	210,636	Dec. 10, 1878	280	76	14	869
Wagon running-gear	A. J. Beach	199,610	Jan. 29, 1878	952	277	13	181
Wagon running-gear	F. Gordon	200,863	Mar. 5, 1878	48	17	13	422
Wagon running-gear	J. B. Nichols	208,627	Oct. 1, 1878	171	50	14	512
Wagon running-gear	W. Ulrich	200,952	Mar. 5, 1878	128	42	13	435
Wagon-seat	A. B. Lawler	207,812	Sept. 10, 1878	243	76	14	383
Wagon-seat corner	R. P. Hicks	208,312	Sept. 24, 1878	805	235	14	463
Wagon-seat spring	W. D. Baker	208,557	Oct. 1, 1878	100	30	14	502
Wagon-seat spring	E. H. Merrill	200,147	Feb. 12, 1878	205	79	13	282
Wagon, Side-bar	W. H. and W. H. Colby	201,389	Mar. 19, 1878	509	184	13	517
Wagon, Side-bar	W. Fenstermacher	203,021	Apr. 30, 1878	1271	367	13	788
Wagon-spring	W. L. Williams	203,863	May 21, 1878	681	194	13	925
Wagon spring-seat	J. B. Gorrell	208,083	Sept. 17, 1878	542	162	14	427
Wagon spring-seat	J. F. King	201,925	Apr. 2, 1878	66	18	13	608
Wagon spring, Side-bar	G. W. Wingler and W. W. Stough	206,056	July 16, 1878	661	191	14	101
Wagon-standard	J. Hobbs	199,439	Jan. 22, 1878	748	219	13	141
Wagon-top	V. B. Grimell	202,810	Apr. 23, 1878	1044	300	13	755
Wagon-top	R. W. Thompson	201,267	Mar. 19, 1878	577	178	13	513
Wagon-top	G. E. Whitaker	200,010	Feb. 5, 1878	113	37	13	251
Wagon trestle, Platform	L. M. Fitch	203,720	May 14, 1878	520	147	13	898
Wagons, Device for propelling	E. Baker	200,016	Feb. 5, 1878	120	39	13	252
Wagons, Device for unloading header	N. Archibald	205,231	June 25, 1878	872	258	13	1139
Wagons, Fifth-wheel coupling-yoke for	C. W. Saladee	210,637	Dec. 10, 1878	281	77	14	869
Wagons, Front-gear coupling for	J. W. and L. S. Trudell	207,916	Sept. 10, 1878	358	109	14	397
Wagons, Iron platform for	W. B. Ronig	206,042	July 16, 1878	644	187	14	99
Wagons, Lap-seat for	G. W. Damon	199,271	Jan. 15, 1878	575	168	13	105
Wagons, Netting for unloading	T. Powell	199,661	Jan. 29, 1878	1006	293	13	189
Wagons, Netting for unloading	J. D. Winters	203,975	May 21, 1878	800	229	13	941
Wagons, Platform-gear for	H. L. Kingsley	205,398	June 25, 1878	1049	511	13	1162
Waistband	L. T. Smith	207,563	Aug. 27, 1878	973	285	14	340
Waistcoat	D. E. Ryan	206,620	July 30, 1878	1319	379	14	191
Waiver	S. W. Babbitt	207,475	Aug. 27, 1878	874	257	14	328
Wall-paper	J. S. Munroe	204,446	June 4, 1878	31	13	13	1017
Wall-paper, Device for hanging	A. Johnson	206,245	July 23, 1878	839	253	14	133
Wall-paper trimmer	R. S. Hill	209,394	Oct. 29, 1878	1037	301	14	648
Wall-protector	G. C. Bovey	203,241	May 7, 1878	5	2	13	821
Walls, ceilings, flues, &c., Fire-proof material for	M. F. Lyons	200,320	Feb. 12, 1878	441	131	13	309
Wantage-rod	E. S. Prime	206,259	July 23, 1878	905	258	14	136
Wardrobe	M. Doyle	204,956	June 18, 1878	581	170	13	1096
Warming and ventilating buildings, Apparatus for	L. Bennet	204,126	May 28, 1878	982	280	13	967
Warping-machine	L. L. Shaw	205,307	June 25, 1878	954	282	13	1150
Warping-machine stop-motion	J. B. Greenhalgh	199,702	Jan. 29, 1878	1047	305	13	195
Warps, Machine for tying in	J. Shackleton and J. P. Binns	209,927	Nov. 12, 1878	422	{ 127 128 129 }	14	741
Wash-bench	C. Barlow	203,877	May 21, 1878	694	198	13	927
Wash-bench and wringer combined	P. H. Cooney	202,155	Apr. 9, 1878	316	93	13	648
Wash-board	C. H. Baldwin	200,852	Mar. 5, 1878	39	14	13	421
Wash-board	W. E. Brock	209,221	Oct. 22, 1878	855	248	14	619
Wash-board	S. L. Caverly	200,258	Feb. 12, 1878	373	110	13	299
Wash-board	I. Darling	202,003	Apr. 2, 1878	140	40, 41	13	619
Wash-board	C. Everts	201,658	Mar. 26, 1878	888	270	13	561
Wash-board	J. R. Finley	203,129	Apr. 30, 1878	1373	400	13	802
Wash-board	G. Gallup	202,536	Apr. 16, 1878	734	212	13	708
Wash-board	R. W. Harper	208,594	Oct. 1, 1878	141	41	14	508
Wash-board	J. F. Jaques	207,184	Aug. 20, 1878	560	168	14	283
Wash-board	B. Kauffmann	206,881	Aug. 13, 1878	246	78	14	241
Wash-board	F. Kueny	204,156	May 28, 1878	1015	288	13	971
Wash-board	F. Murphy	201,821	Mar. 26, 1878	1046	319	13	585
Wash-board	F. W. Parsons	202,285	Apr. 9, 1878	453	132	13	667
Wash-board	J. T. Sargent	207,134	Aug. 20, 1878	509	154	14	277
Wash-board	M. A. Smith	203,786	May 14, 1878	592	165	13	906
Wash-board	M. A. Smith	205,148	June 18, 1878	774	228	13	1121
Wash-board	H. L. St. Clair	201,063	Mar. 5, 1878	242	77	13	452
Wash-board	F. L. Wilson	199,607	Jan. 22, 1878	9, 24	271	13	168
Wash-boiler	A. Friedley	204,311	May 28, 1878	1175	335	13	992
Wash-boiler	F. H. Good	206,312	July 23, 1878	968	275	14	144
Wash-boiler	J. J. Hall	204,034	May 21, 1878	867	248	13	949
Wash-boiler	W. A. Miller	201,190	Mar. 12, 1878	371	115	13	478
Wash-boiler	E. G. Woodworth	207,147	Aug. 20, 1878	521	157	14	278
Wash-boiler bottom	C. R. Everson	203,331	May 7, 1878	100	29	13	833
Washer							
See Axle-tree washer.	Hand-washer.						
Barrel-washer.	Leather-washer.						
Bottle-washer.	Paper-pulp washer.						
Clothes-washer.	Tobacco-washer.						
Dish-washer.							
Washer and wringer combined	J. W. Sheetz	205,003	June 18, 1878	627	184	13	1102
Washer-cutter	A. J. Palmer	210,553	Dec. 3, 1878	176	47	14	846
Washers, Device for cutting	W. F. Tilton	209,726	Nov. 5, 1878	206	61	14	708

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Washing-machine.....	J. Arnold.....	204,518	June 4, 1878	92	31	13	1025
Washing-machine.....	I. Austin.....	203,695	May 14, 1878	496	140	13	885
Washing-machine.....	R. G. Baldwin.....	206,522	July 30, 1878	1218	350	14	178
Washing-machine.....	J. G. Beardsley.....	202,781	Apr. 23, 1878	1009	290	13	751
Washing-machine.....	L. Becker.....	203,447	Oct. 29, 1878	1092	318	14	656
Washing-machine.....	G. Burkhardt.....	203,704	May 14, 1878	503	143	13	896
Washing-machine.....	G. F. Burch.....	207,943	Sept. 10, 1878	380	117	14	401
Washing-machine.....	S. Byrne.....	209,797	Nov. 12, 1878	292	87	14	724
Washing-machine.....	J. W. Caley.....	201,224	Mar. 12, 1878	406	125	13	483
Washing-machine.....	J. H. Carrier, B. R. Baker, and W. McCarty.....	205,784	July 9, 1878	363	104	14	58
Washing-machine.....	D. Coman.....	209,023	Oct. 15, 1878	627	181	14	583
Washing-machine.....	B. F. Comstock.....	200,896	Mar. 5, 1878	79	28	13	427
Washing-machine.....	D. A. Cotter and N. Warrell.....	205,081	July 2, 1878	234	69	14	38
Washing-machine.....	A. R. Dickason.....	210,302	Nov. 26, 1878	852	251	14	806
Washing-machine.....	C. A. Dodge.....	201,109	Mar. 12, 1878	351	108	13	475
Washing-machine.....	C. A. Dodge.....	203,250	May 7, 1878	14	6	13	823
Washing-machine.....	C. A. Dodge.....	205,063	June 18, 1878	684	201	13	1110
Washing-machine.....	J. Dunn.....	202,421	Apr. 16, 1878	607	178	13	693
Washing-machine.....	J. W. Elston.....	205,932	July 16, 1878	555	158	14	88
Washing-machine.....	W. M. Fitzwater.....	204,661	June 11, 1878	244	76	13	1050
Washing-machine.....	E. S. M. Ford.....	204,310	May 28, 1878	1175	335	13	992
Washing-machine.....	A. R. Fowler.....	209,035	Oct. 15, 1878	639	185	14	585
Washing-machine.....	J. W. Gladwell and J. R. White.....	202,104	Apr. 9, 1878	263	77	13	641
Washing-machine.....	J. T. Greenwood, jr.....	200,052	Feb. 5, 1878	102	52	13	258
Washing-machine.....	C. and A. W. Guyer.....	204,032	May 21, 1878	866	247	13	949
Washing-machine.....	W. Haas.....	203,031	Apr. 30, 1878	1279	370	13	780
Washing-machine.....	W. Harris.....	204,666	June 11, 1878	250	78	13	1051
Washing-machine.....	A. Harshberger.....	211,012	Dec. 17, 1878	708	195	14	831
Washing-machine.....	W. L. Hess and L. W. Newton.....	204,039	May 21, 1878	871	249	13	950
Washing-machine.....	C. H. Horne.....	200,455	Feb. 19, 1878	583	172	13	239
Washing-machine.....	D. T. Jones.....	200,693	Nov. 5, 1878	170	50	14	704
Washing-machine.....	H. H. Kinder.....	206,578	July 30, 1878	1280	367	14	186
Washing-machine.....	W. Lynch.....	207,071	Sept. 10, 1878	416	125	14	405
Washing-machine.....	R. E. McCauley.....	205,198	June 25, 1878	837	248	13	1135
Washing-machine.....	A. McGraw and J. Gilbaugh.....	201,434	Mar. 19, 1878	645	197	13	523
Washing-machine.....	H. H. McMaster.....	203,062	Apr. 30, 1878	1303	379	13	793
Washing-machine.....	J. Metals.....	200,469	Feb. 19, 1878	598	170	13	341
Washing-machine.....	D. W. Miller.....	209,499	Oct. 29, 1878	1146	331	14	664
Washing-machine.....	W. H. Moss and O. B. Day.....	209,502	Oct. 29, 1878	1148	334	14	664
Washing-machine.....	W. H. Nicholson.....	200,800	Feb. 26, 1878	948	279	13	402
Washing-machine.....	J. M. Oakley.....	203,366	May 7, 1878	137	39	13	839
Washing-machine.....	J. G. Oesterle.....	202,456	Apr. 16, 1878	642	187	13	698
Washing-machine.....	J. M. Overshiner and T. Shannon.....	203,367	May 7, 1878	138	40	13	829
Washing-machine.....	J. F. Pond.....	200,756	Feb. 26, 1878	907	267	13	385
Washing-machine.....	M. Puckett.....	208,121	Sept. 17, 1878	585	173	14	432
Washing-machine.....	A. A. Randall and E. Foster.....	208,201	Sept. 17, 1878	666	196	14	443
Washing-machine.....	F. F. Reynolds.....	208,990	Oct. 15, 1878	585	170	14	578
Washing-machine.....	J. W. Ricker.....	200,220	Feb. 12, 1878	333	100	13	230
Washing-machine.....	W. and A. E. Roberts.....	199,467	Jan. 22, 1878	775	227	13	145
Washing-machine.....	E. O. Rood.....	201,126	Mar. 12, 1878	311	95	13	469
Washing-machine.....	S. Russel.....	202,475*	Apr. 16, 1878	658	193	13	700
Washing-machine.....	B. F. Sanders, R. G. Dildine, and B. F. Head.....	204,616	June 4, 1878	197	63	13	1040
Washing-machine.....	M. M. Sanders.....	205,424	June 25, 1878	1073	{ 317 318 }	{ 13 13 }	{ 1106 1091 }
Washing-machine.....	H. Schmelzpfenning.....	204,917	June 18, 1878	543	158	13	1091
Washing-machine.....	M. L. Scivalley.....	207,555	Aug. 27, 1878	963	282	14	839
Washing-machine.....	W. W. Sellick and J. Young.....	208,340	Sept. 24, 1878	833	243	14	467
Washing-machine.....	S. B. Schultz.....	207,215	Aug. 20, 1878	590	177	14	287
Washing-machine.....	H. Sievert and F. J. Young.....	200,942	Mar. 5, 1878	119	40	13	433
Washing-machine.....	C. P. Smith.....	204,854	June 11, 1878	452	132	13	1073
Washing-machine.....	D. Spain and B. H. Reynolds.....	202,065	Apr. 2, 1878	203	50, 69	13	628
Washing-machine.....	W. H. Stein.....	202,598	Apr. 16, 1878	800	231	13	716
Washing-machine.....	W. J. Stewart.....	200,356	Feb. 12, 1878	477	141	13	314
Washing-machine.....	J. J. Straub.....	202,887	Apr. 23, 1878	1126	323	13	765
Washing-machine.....	T. Stumm.....	207,437	Aug. 27, 1878	857	253	14	326
Washing-machine.....	F. A. Tappan and S. A. Shaw.....	210,064	Nov. 19, 1878	583	174	14	766
Washing-machine.....	C. Thompson.....	202,889	Apr. 23, 1878	1127	324	13	766
Washing-machine.....	J. F. Tridle.....	208,648	Oct. 1, 1878	197	56	14	515
Washing-machine.....	J. R. Underwood.....	202,307	Apr. 9, 1878	474	138	13	670
Washing-machine.....	J. B. Wantz and L. W. Strasbaugh.....	199,603	Jan. 22, 1878	910	269	13	166
Washing-machine.....	T. C. Welch.....	200,635	Feb. 26, 1878	777	229	13	376
Washing-machine.....	J. Wells.....	208,777	Oct. 8, 1878	844	99	14	542
Washing-machine.....	R. M. Wilder.....	210,175	Nov. 19, 1878	702	209	14	752
Washing-machine.....	W. F. Wilkins.....	202,391	Apr. 16, 1878	576	169	13	688
Washing-machine.....	J. Will.....	202,317	Apr. 9, 1878	486	142	13	673
Washing-machine.....	T. A. Wilson.....	207,232	Aug. 20, 1878	609	183	14	289
Washing-machine boiler.....	F. A. Houck and J. E. Gardner.....	208,602	Oct. 1, 1878	148	43	14	569
Washing-machine boiler.....	J. P. La Grange.....	198,722	Jan. 29, 1878	1064	311	13	198
Washing-machine clamp.....	C. A. Dodge.....	199,358	Jan. 22, 1878	673	197	13	129
Washing-machine pounder.....	C. A. Dodge.....	205,366	June 25, 1878	1017	301	13	1158
Washing-machine pounder.....	P. Hauserperger.....	205,959	July 16, 1878	563	161	14	89
Washing-machine pounder.....	T. Snow.....	207,565	Aug. 27, 1878	975	286	14	341
Washing-machine, Steam.....	D. J. H. Davies.....	202,243	Apr. 9, 1878	410	119	13	681
Washing piece-goods, Device for.....	S. Arnold.....	204,938	June 18, 1878	563	{ 164 165 }	{ 13 13 }	{ 1093 1093 }
Wash-stand.....	W. E. Buser.....	199,510	Jan. 22, 1878	822	240	13	132
Wash-stand.....	H. S. Hale.....	202,257	Apr. 9, 1878	422	123	13	693
Wash-stand for factories, &c.....	W. Humphrey.....	206,454	July 30, 1878	1147	328	14	170
Wash-stands, water-closets, &c., Sealing-cover for bowls of.....	F. Grosjean.....	204,318	May 28, 1878	1184	337	13	993
Wash-tub of hydraulic cement, Stationary.....	D. Burke.....	206,000	July 16, 1878	606	174	14	94

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Wash-tubs of clay or porcelain, Manufacture of stationary.	B. Morahan	207, 978	Sept. 10, 1878	423	128	14	406
Waste-pipe for basins, &c.	I. A. Singer	202, 762	Apr. 23, 1878	990	285	13	748
Waste-pipe valve.	J. Q. Adams	206, 207	July 23, 1878	850	242	14	128
Waste-trap.	D. Healy	204, 037	May 21, 1878	869	249	13	949
Waste-water detector.	W. E. Worthen	207, 378	Aug. 27, 1878	772	230	14	316
Watch.	D. A. A. Buck	204, 000	May 21, 1878	830	237	13	944
Watch and clock escapement.	J. M. Hitchcock	200, 533	Feb. 19, 1878	660	194	13	350
Watch-balances, Gage for adjusting the hair-spring of.	J. Kinehan	200, 732	Feb. 26, 1878	885	260	13	392
Watch-barrels, Safety-click for.	A. Call	209, 457	Oct. 29, 1878	1104	321	14	658
Watch-calendar.	E. H. Hull	201, 418	Mar. 19, 1878	630	192	13	521
Watch-calendar.	M. U. Paddock	203, 040	May 14, 1878	432	124	13	887
Watch-case.	O. Dornon	200, 379	Feb. 19, 1878	511	151	13	328
Watch-case spring.	J. Laurent	199, 835	Jan. 29, 1878	1171	343	13	214
Watch-case spring.	P. F. Wilson	201, 623	Mar. 26, 1878	855	260	13	556
Watch-cases, Center-rim for.	T. A. Hopkins	203, 040	Apr. 30, 1878	1292	374	13	791
Watch-cases, Center-rim for.	D. H. Pearce and A. W. Taft	202, 458	Apr. 16, 1878	644	188	13	698
Watch, Chronograph.	C. F. Mcylan	202, 041	Apr. 2, 1878	183	53	13	624
Watch-crown.	A. Milno and A. Jourdain	199, 732	Jan. 29, 1878	1072	314	13	109
Watch-escapement.	D. A. A. Buck	203, 999	May 21, 1878	828	237	13	944
Watch going-barrel.	F. Fitt	202, 012	Apr. 2, 1878	149	43	13	621
Watch-guard tip.	C. E. Hayward	199, 365	Jan. 22, 1878	681	200	13	130
Watch-key, Adjustable.	W. Haines	202, 344	Apr. 16, 1878	533	156	13	682
Watch-key, Adjustable.	W. Haines	209, 340	Oct. 29, 1878	983	286	14	640
Watch-key and pencil-case combined.	G. W. Mahie	206, 591	July 30, 1878	1292	371	14	188
Watch-pendant.	W. D. McGloghlon	208, 480	Oct. 1, 1878	27	8	14	402
Watch-plate.	D. A. A. Buck	203, 998	May 21, 1878	827	237	13	944
Watch-plate.	J. L. Hutchinson and H. Dehouck	200, 539	Feb. 19, 1878	665	196	13	351
Watch-potance.	C. V. Weerd	199, 392	Jan. 22, 1878	707	208	13	134
Watch-regulator.	G. Richel	204, 267	May 28, 1878	1151	329	13	989
Watch-regulator.	L. C. Briggs	206, 533	July 30, 1878	1227	353	14	180
Watch-stem.	A. Milno and A. Jourdain	206, 598	July 30, 1878	1299	374	14	188
Watch, Stem-winding.	H. Abbott	203, 524	May 14, 1878	819	91	13	873
Watch, Stem winding and setting.	O. Hoyt	206, 674	Aug. 6, 1878	18	6	14	209
Watch-winding attachment.	C. W. Hoehn	203, 455	May 7, 1878	233	66	13	852
Watch-winding device.	B. Wormelle	204, 274	May 28, 1878	1135	325	13	987
Watch-winding device.	W. H. Zinn	209, 441	Oct. 29, 1878	1087	316	14	656
Watches and lockets, Swivel for.	B. T. Pace	201, 357	Mar. 19, 1878	569	175	13	512
Watches, Pendant for.	F. Steffany	201, 402	Mar. 19, 1878	672	205	13	527
Watches, Reversible center-pinion for.	C. O. Balliet	209, 375	Oct. 29, 1878	1021	297	14	646
Watches, Reversible pinion for.	W. P. Huntoon	200, 831	Mar. 5, 1878	18	7	13	417
Watches, Safety-wheel for.	B. F. Stoner	202, 601	Apr. 16, 1878	802	232	13	716
Watches, Stem winding and setting device for.	O. Dornon	200, 380	Feb. 19, 1878	512	151	13	328
Watches, Winding-click for.	C. T. Hieginbotham	204, 150	May 28, 1878	1009	287	13	971
Watchman's detector.	T. D. Osborne	200, 928	Mar. 5, 1878	107	36	13	432
Water-aerator.	J. S. and R. T. Higgins	210, 034	Nov. 19, 1878	553	165	14	762
Water, Apparatus for deaerating.	E. Buegin	199, 785	Jan. 29, 1878	1123	330	13	207
Water, Apparatus for supplying and filtering.	H. C. Hall	209, 858	Nov. 12, 1878	356	106	14	732
Water bibb or cock.	C. J. Elliott and H. B. McCool	209, 161	Oct. 22, 1878	795	231	14	611
Water-boiler for stoves and ranges.	E. Stumm	199, 119	Jan. 8, 1878	412	121	13	80
Water-can.	C. Smith	201, 712	Mar. 26, 1878	935	287	13	568
Water-closet.	W. Bishop	205, 036	June 18, 1878	657	193	13	1106
Water-closet.	W. Bunting, jr.	210, 063	Nov. 19, 1878	524	157	14	758
Water-closet.	L. P. Clark	199, 029	Jan. 8, 1878	318	93	13	65
Water-closet.	J. Demarest	209, 870	Nov. 12, 1878	367	109	14	734
Water-closet.	J. Demarest	210, 677	Dec. 10, 1878	324	88	14	874
Water-closet.	M. Hogan	202, 652	Apr. 23, 1878	878	251	13	734
Water-closet.	M. Hogan	203, 045	Apr. 30, 1878	1291	374	13	791
Water-closet.	M. J. McEwan	205, 284	June 25, 1878	925	275	13	1146
Water-closet.	C. H. Moore	207, 196	Aug. 20, 1878	573	172	14	285
Water-closet.	W. G. Rhoads	203, 071	Apr. 30, 1878	1313	382	13	754
Water-closet.	C. Rogers	209, 295	Oct. 22, 1878	925	270	14	629
Water-closet.	J. H. Stevens	199, 326	Jan. 15, 1878	630	183	13	114
Water-closet.	W. Dutton	206, 370	July 23, 1878	1041	299	14	152
Water-closet.	W. Wellington.	209, 999	Nov. 19, 1878	511	155	14	756
Water-closet.	J. M. Wilson	202, 619	Apr. 16, 1878	822	238	13	718
Water-closet, Bidet.	J. Reid	206, 484	July 30, 1878	1178	338	14	173
Water-closet bowl.	J. L. Hutchinson	199, 831	Jan. 29, 1878	1168	343	13	214
Water-closet cock.	J. D. Sisson	201, 957	Apr. 2, 1878	92	26	13	612
Water-closet paper, Box for.	P. C. Dawson	205, 841	July 9, 1878	422	120	13	66
Water-closet seat.	A. Waldron	203, 225	Apr. 30, 1878	1476	432	13	814
Water-closet, Ship's.	J. E. Jones	199, 369	Jan. 22, 1878	683	200	13	130
Water-closet supply apparatus.	H. C. Meyer	201, 815	Mar. 26, 1878	1040	318	13	584
Water-closet trap.	J. Sargent	199, 582	Jan. 22, 1878	894	262	13	164
Water-closet valve.	J. Demarest	199, 418	Jan. 22, 1878	731	215	13	138
Water-closet, &c., valve.	C. C. Frost	205, 626	July 2, 1878	166	50	14	30
Water-closet valve.	J. P. Kenyon	209, 345	Oct. 29, 1878	988	287	14	641
Water-closet valve.	W. McElroy	207, 615	Sept. 3, 1878	31	11	14	373
Water-closet valve.	J. H. Quinn	205, 903	July 9, 1878	488	139	14	74
Water-closet valve.	R. Smith and P. Connolly	208, 427	Sept. 24, 1878	926	271	14	478
Water-closet valve.	W. Smith	206, 649	July 16, 1878	652	189	14	101
Water-closets, Disinfecting attachment to.	J. F. Naulty	203, 563	Feb. 19, 1878	690	203	13	355
Water-closets, Disinfecting attachment to.	J. F. Naulty	203, 186	Apr. 30, 1878	1436	419	13	810
Water-closets, Flushing-box for.	W. G. Rhoads	202, 586	Apr. 16, 1878	786	227	13	714
Water-closets, Preventing the siphoning of traps of.	P. McDermott and J. P. Hyde.	200, 323	Feb. 12, 1878	446	132	13	309
Water-closets, Slop-safe for.	J. Demarest	199, 806	Jan. 29, 1878	1145	336	13	210
Water-closets, Urinal-safe for.	T. G. Kaicht	210, 786	Dec. 10, 1878	435	121	14	889
Water-cooler.	G. W. Malpass	208, 913	Oct. 15, 1878	505	145	14	567
Water-cooler.	F. G. and W. F. Niedringhaus	206, 816	Aug. 6, 1878	160	51	14	227
Water-cooler and filter, Combined.	J. C. Jewett	208, 909	Oct. 15, 1878	500	144	14	567
Water-drawer.	W. M. Mathes	204, 746	June 11, 1878	335	101	13	1062
Water-elevator.	A. J. Clemmons	209, 655	Nov. 5, 1878	132	38	14	638



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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Water-elevator.....	A. B. Davis.....	207,799	Sept. 10, 1878	230	72	14	381
Water-elevator.....	M. V. Wright.....	268,217	Sept. 17, 1878	689	203	14	446
Water-elevator, Steam.....	W. B. Doty.....	202,248	Apr. 9, 1878	415	121	13	661
Water-elevator, Windlass.....	J. Knipscheer.....	209,057	Oct. 15, 1878	668	192	14	589
Water-flow regulator, Automatic.....	J. P. Hutchinson.....	205,553	July 2, 1878	94	26	14	21
Water-gage.....	G. H. Crosby.....	208,963	Oct. 15, 1878	562	164	14	575
Water-gage for steam-boilers.....	E. B. Kunkle.....	210,261	Nov. 26, 1878	807	239	14	800
Water-gate.....	P. Giovannini and B. Benner-scheidt.....	209,882	Nov. 12, 1878	378	113	14	735
Water-gate or stop-valve.....	A. C. Austin.....	203,985	May 21, 1878	811	233	13	942
Water-heater.....	C. Matthews and W. Holt.....	201,885	Apr. 2, 1878	26	7	13	602
Water-heater, Portable.....	E. Hersey.....	208,174	Sept. 17, 1878	645	189	14	440
Water-heater, Steam.....	A. N. Tregent.....	205,153	June 18, 1878	779	220	13	1122
Water-heating apparatus.....	R. Freer.....	200,998	Mar. 5, 1878	178	56	13	442
Water-heating apparatus.....	A. R. Walker.....	203,392	May 7, 1878	165	47	13	643
Water-indicator, Electric auto-pneumatic.....	A. Gerard.....	205,539	July 2, 1878	80	22	14	19
Water-level indicator.....	E. Jerome.....	209,052	Oct. 15, 1878	663	191	14	588
Water-lifter, Automatic.....	A. Gregg.....	206,435	July 30, 1878	1126	322	14	167
Water-meter and motor, Piston.....	J. C. Dennert.....	201,505	Mar. 19, 1878	713	217	13	533
Water-meter, Oscillating.....	A. C. Austin.....	203,812	May 21, 1878	632	178	13	919
Water-meter, Oscillating.....	J. A. Ayres.....	210,898	Dec. 17, 1878	581	160	14	916
Water-meter, Oscillating.....	J. Heimlich and L. O. Debnel.....	203,030	Apr. 30, 1878	1285	372	13	790
Water-meter, Piston.....	H. L. Arnold.....	203,984	May 21, 1878	808	232	13	942
Water-meter, Piston.....	J. Barnes.....	203,876	May 21, 1878	808	198	13	927
Water-meter, Piston.....	H. Chandler.....	199,351	Jan. 22, 1878	663	194	13	127
Water-meter, Piston.....	H. Chandler.....	199,352	Jan. 22, 1878	565	195	13	128
Water-meter, Piston.....	T. McIlroy.....	204,357	May 28, 1878	1224	349	13	998
Water-meter, Piston.....	M. Stannard and J. R. Reynolds.....	202,127	Apr. 9, 1878	288	85	13	644
Water-meter, Piston.....	D. H. Tebay.....	211,064	Dec. 17, 1878	781	214	14	940
Water-meter, Piston.....	P. Wells.....	205,933	July 9, 1878	521	148	14	78
Water-meter, Rotary.....	N. B. Acheson.....	206,065	July 10, 1878	669	193	14	102
Water-meter, Rotary.....	W. H. Cusack and E. B. Verouee.....	210,841	Dec. 17, 1878	563	142	14	906
Water-meter, Rotary.....	B. Fitts.....	207,862	Sept. 10, 1878	296	91	14	390
Water-meter, Rotary.....	J. Johnson.....	202,827	Apr. 23, 1878	163	804	13	757
Water-meter, Rotary.....	T. Walsh.....	200,676	Feb. 26, 1878	826	243	13	582
Water-meter, Rotary.....	T. Walsh.....	210,378	Nov. 26, 1878	943	274	14	817
Water-meter, Rotary.....	M. Wheeler.....	203,985	May 14, 1878	488	137	13	686
Water-mill.....	S. M. Stewart.....	209,143	Oct. 22, 1878	778	226	14	609
Water, Mold for freezing.....	W. R. Close.....	200,605	Feb. 26, 1878	751	220	13	372
Water-motor.....	A. W. Bush.....	207,247	Aug. 20, 1878	627	187	14	291
Water-motor.....	W. F. Eyster.....	201,511	Mar. 19, 1878	721	219	13	534
Water-motor.....	G. W. Stith.....	201,464	Mar. 19, 1878	673	205	13	527
Water-motor.....	J. S. Williams.....	200,679	Feb. 26, 1878	830	244	13	384
Water-pipe joint.....	F. P. Hallberg.....	204,033	May 21, 1878	866	248	13	949
Water-pipe trap.....	O. Gillig.....	201,239	Mar. 12, 1878	427	131	13	485
Water-pipes, Device for tapping.....	W. W. Hawkes.....	204,730	June 11, 1878	320	97	13	1090
Water-pipes, Stop and waste attachment for.....	W. A. Crawford.....	206,090	July 16, 1878	692	200	14	105
Water-plug or hydrant.....	M. Hogan.....	204,822	June 11, 1878	417	123	13	1071
Water-power closet-ventilator.....	W. Selvey.....	206,491	July 30, 1878	1188	341	14	175
Water-power in pipes, Utilizing.....	J. C. Estey.....	201,875	Apr. 2, 1878	18	5	13	601
Water-purifier.....	I. Brach.....	203,110	Apr. 30, 1878	1351	393	13	799
Water-raising apparatus.....	J. C. Kile.....	202,950	Apr. 30, 1878	1200	347	13	770
Water-raising apparatus.....	F. J. Seybold.....	205,216	June 25, 1878	855	254	13	1137
Water-raising apparatus, Electro-magnetic.....	D. M. Smyth.....	202,764	Apr. 23, 1878	992	285	13	748
Water-regulator.....	H. Mueller and J. Gross.....	200,871	Mar. 5, 1878	50	20	13	424
Water-reservoir and stove-pipe shelf combined.....	J. W. Barton.....	204,942	June 18, 1878	569	166	13	1094
Water shut-off, Rain.....	H. M. Rokey.....	200,344	Feb. 12, 1878	404	137	13	312
Water-tanks, Swing-pipe for.....	J. Cantelo.....	209,801	Nov. 12, 1878	558	107	14	733
Water to buildings, Supplying.....	E. A. Warren.....	203,802	May 14, 1878	608	170	13	908
Water-trap.....	L. Brandeis.....	201,090	Mar. 12, 1878	273	85	13	464
Water-trap for sinks, &c.....	J. Barrett.....	207,938	Sept. 10, 1878	384	116	14	400
Water-trap for waste-pipes.....	W. P. Austin.....	208,139	Sept. 17, 1878	606	179	14	435
Water-trough, Self-feeding.....	A. M. Brown.....	209,378	Oct. 29, 1878	1024	297	14	648
Water-valve.....	J. Cantelo.....	207,712	Sept. 3, 1878	128	40	14	365
Water-wheel.....	W. S. Clay.....	204,292	May 28, 1878	1150	330	13	969
Water-wheel.....	A. G. Cline.....	210,298	Nov. 26, 1878	848	249	14	805
Water-wheel.....	D. L. Cross.....	199,035	Jan. 8, 1878	323	95	13	66
Water-wheel.....	T. Dehart.....	209,067	Nov. 5, 1878	144	42	14	700
Water-wheel.....	W. H. Elmer.....	209,873	Nov. 12, 1878	370	{ 110 111 }	14	734
Water-wheel.....	J. W. Gray.....	210,023	Nov. 19, 1878	543	162	14	761
Water-wheel.....	O. Griffith.....	205,741	July 9, 1878	313	92	14	52
Water-wheel.....	S. P. Mackey.....	201,690	Mar. 26, 1878	914	279	13	565
Water-wheel.....	W. Read.....	207,894	Sept. 10, 1878	337	101	14	394
Water-wheel.....	C. F. Smith.....	202,062	Apr. 2, 1878	201	59	13	627
Water-wheel.....	P. Stovall.....	210,161	Nov. 19, 1878	689	205	14	781
Water-wheel, Current.....	W. W. Cleaveland.....	210,184	Nov. 26, 1878	729	216	14	790
Water-wheel, Endless-chain.....	W. L. Orran.....	207,202	Aug. 20, 1878	570	174	14	296
Water-wheel flume.....	J. P. Drouillard.....	199,274	Jan. 15, 1878	577	168	13	105
Water-wheel gate.....	J. S. Ladow.....	204,050	May 21, 1878	880	252	13	951
Water-wheel, Turbine.....	A. Bee.....	200,966	Mar. 5, 1878	142	{ 46, 47 246 247 }	13	437
Water-wheel, Turbine.....	J. W. Brookwalter.....	209,219	Oct. 22, 1878	852	{ 246 247 }	14	619
Water-wheel, Turbine.....	J. Croft.....	209,662	Nov. 5, 1878	139	41	14	709
Water-wheel, Turbine.....	G. A. Harbaugh.....	201,007	Mar. 5, 1878	185	50	13	444
Water-wheel, Turbine.....	L. J. Johnson.....	205,392	June 25, 1878	1043	309	13	1,61
Water-wheel, Turbine.....	J. Schuessler.....	205,145	June 18, 1878	771	{ 227 228 }	13	1121
Water-wheel, Turbine.....	I. Sherck.....	201,635	Mar. 26, 1878	867	264	13	558
Water-wheel, Turbine.....	R. M. Stewart.....	199,873	Jan. 29, 1878	1202	333	13	219
Water-wheel, Turbine.....	J. G. Thompson.....	199,123	Jan. 8, 1878	415	122	13	80
Water-wheel, Turbine.....	T. Tripp.....	201,133	Mar. 12, 1878	318	98	13	469
Water-wheel, Turbine.....	L. D. Wynkoop.....	201,584	Mar. 19, 1878	802	244	13	544
Watering animals, Device for.....	A. M. Teller.....	201,961	Apr. 2, 1878	98	28	13	613
Watering stock, Apparatus for.....	W. Riley.....	210,960	Dec. 17, 1878	658	181	14	925

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Watering-trough .....	O. J. Smith .....	205, 430	June 25, 1878	1079	320	13	1166
Watering-trough for cattle, Fountain .....	S. Johnson .....	198, 744	Jan. 1, 1878	15	4	13	11
Waterproofing composition .....	W. W. Baxter .....	204, 702	June 11, 1878	287	.....	13	1056
Wave-power .....	W. Filmer .....	209, 391	Oct. 29, 1878	1035	301	14	648
Wave-power, Mechanism for utilizing .....	C. W. Lord .....	202, 113	Apr. 9, 1878	271	80	13	642
Weaner, Calf .....	W. C. and G. L. Banks .....	202, 399	Apr. 16, 1878	583	171	13	689
Weather-board gage .....	W. Z. Marsh .....	198, 772	Jan. 1, 1878	52	14	13	16
Weather-strip .....	H. B. Alvord .....	202, 088	Apr. 9, 1878	247	73	13	639
Weather-strip .....	D. Austin .....	204, 122	May 28, 1878	979	279	13	967
Weather-strip .....	A. W. Comstock .....	200, 177	Feb. 12, 1878	295	88	13	257
Weather-strip .....	E. Conklin .....	208, 466	Oct. 1, 1878	14	4	14	490
Weather-strip .....	J. W. H. Doubler .....	202, 007	Apr. 2, 1878	143	42	13	620
Weather-strip .....	P. England .....	210, 309	Nov. 26, 1878	858	252	14	806
Weather-strip .....	B. C. W. Harris and F. M. Williams .....	203, 448	May 7, 1878	227	64	13	851
Weather-strip .....	N. Rowen and M. D. Miller .....	205, 686	July 2, 1878	239	71	14	39
Weather-strip .....	N. Smith .....	209, 839	Nov. 12, 1878	335	100	14	730
Weather-strip .....	D. S. Wood .....	202, 912	Apr. 23, 1878	1149	330	13	768
Weather-strip for door-sills .....	G. B. Norton .....	207, 066	Aug. 27, 1878	760	226	14	314
Weaving-needle .....	H. Ball .....	199, 774	Jan. 29, 1878	1110	526	13	205
Weeder .....	K. P. Grant .....	208, 084	Sept. 17, 1878	543	162	14	427
Weeding implement .....	J. F. Turner .....	203, 798	May 14, 1878	604	169	13	908
Weighing apparatus .....	J. H. Wright .....	209, 099	Oct. 15, 1878	713	206	14	595
Weighing device .....	R. Kirkpatrick .....	205, 559	July 2, 1878	102	29	14	22
Weighing device, Hog .....	S. B. Thomas .....	204, 633	June 4, 1878	209	67	13	1042
Weight-motor .....	A. Barker .....	201, 482	Mar. 19, 1878	690	211	13	530
Welding chain-links, Machine for .....	J. Haley .....	202, 258	Apr. 9, 1878	423	{ 123 124 }	13	063
Welding copper .....	J. Burnes .....	210, 990	Dec. 17, 1878	684	.....	14	928
Welding copper .....	R. P. Williams and L. Worsham .....	207, 145	Aug. 20, 1878	520	.....	14	278
Welding furnace, Link .....	J. H. Helm .....	200, 195	Feb. 12, 1878	311	93	13	289
Well-borer .....	T. P. Thompson .....	203, 217	Apr. 30, 1878	1467	429	13	814
Well boring and drilling apparatus .....	J. R. Davis .....	202, 417	Apr. 16, 1878	600	177	13	692
Well boring and drilling apparatus .....	O. Martin .....	209, 347	Oct. 29, 1878	990	288	14	641
Well-boring and rock-drilling machine .....	J. P. Summers .....	202, 677	Apr. 23, 1878	903	259	13	737
Well-boring machine .....	J. Haas and J. Manning .....	199, 640	Jan. 29, 1878	985	{ 286 287 }	13	185
Well-curbings, Wooden .....	J. P. Naas .....	209, 976	Nov. 19, 1878	492	150	14	754
Well-drilling apparatus .....	J. B. and G. R. Elliott .....	204, 143	May 28, 1878	1001	284	13	969
Well-drilling apparatus, Oil .....	J. S. Bishop .....	203, 403	May 7, 1878	173	50	13	844
Well packers, Anchor for oil .....	L. Stewart .....	210, 575	Dec. 3, 1878	206	54	14	850
Well sprinkler, Oil .....	J. C. Lorenz .....	201, 619	Mar. 26, 1878	851	259	13	555
Well tools, Joint for oil .....	J. L. Alexander .....	201, 082	Mar. 12, 1878	265	83	13	463
Well tools, Joint for oil .....	H. S. Southard, H. C. Crowell, and J. K. Hallock .....	210, 720	Dec. 10, 1878	367	100	14	880
Well-tube clamp .....	F. B. O'Donnell .....	200, 329	Feb. 12, 1878	451	133	13	310
Well-tubing .....	N. K. Ludlow .....	208, 619	Oct. 1, 1878	163	47	14	511
Well valve, Oil .....	L. W. Young .....	203, 235	Apr. 30, 1878	1484	434	13	815
Wells, Apparatus for boring oil .....	B. F. Asper and R. Magill .....	208, 555	Oct. 1, 1878	97	29	14	502
Wells by compressed air and petroleum-gas, Drilling and pumping oil .....	M. J. Seymour .....	205, 811	July 9, 1878	393	113	14	62
Wells, Casing for oil .....	G. Koch .....	208, 610	Oct. 1, 1878	154	45	14	510
Wells, Casing-head for oil .....	F. A. Conkle .....	206, 932	Aug. 13, 1878	298	91	14	247
Wells, Casing-spear for oil .....	J. Bole .....	204, 878	June 18, 1878	502	147	13	1085
Wells, Clamp for polish-rods of oil and other .....	J. H. Luther .....	208, 832	Oct. 8, 1878	403	116	14	550
Wells, Combined elevator and clamp for sucker-rods of oil .....	J. A. Morrison .....	201, 191	Mar. 12, 1878	371	116	13	478
Wells, Cover for casing-heads of oil .....	W. Y. Rohrbach .....	205, 577	July 2, 1878	121	36	14	24
Wells, Device for raising and lowering tubes in .....	H. M. Gillespie .....	199, 533	Jan. 22, 1878	850	248	13	157
Wells, Device for removing paraffine from oil .....	J. D. Glenn .....	209, 253	Oct. 22, 1878	882	257	14	623
Wells, Drilling-machine for artesian and other .....	J. Button .....	210, 007	Nov. 19, 1878	527	158	14	758
Wells, Drop-weight for oil .....	M. T. McCormick .....	200, 144	Feb. 12, 1878	262	78	13	282
Wells, Ejector for oil .....	T. B. Gunning .....	204, 725	June 11, 1878	314	96	13	1060
Wells, Lining bored .....	J. Dollard .....	202, 796	Apr. 23, 1878	1024	293	13	753
Wells, Machine for drilling and pumping oil .....	A. and A. I. Dingley .....	207, 506	Aug. 27, 1878	906	267	14	332
Wells or cisterns, Hydraulic connection for a series of .....	W. E. Worthen .....	205, 779	July 9, 1878	354	102	14	57
Wells, Polish-rod adjuster for oil .....	A. M. Kleckner .....	199, 809	Jan. 29, 1878	1146	337	13	211
Wells, Ram for opening crevices in oil .....	A. Alexander .....	199, 488	Jan. 22, 1878	795	234	13	148
Wells, Rig for drilling oil and other .....	E. E. Sweet .....	205, 105	June 18, 1878	724	216	13	1115
Wells, Rock-washer for oil .....	F. Jennerat and L. E. Simons .....	206, 242	July 26, 1878	886	253	14	133
Wells, Rod-adjuster for oil .....	P. H. Melvin .....	210, 618	Dec. 10, 1878	261	71	14	866
Wells, Steam-heater for oil .....	J. Harris .....	200, 393	Feb. 19, 1878	525	155	13	320
Wells, Temper-screw and cable-clamp for drilling oil .....	J. Small .....	206, 751	Aug. 6, 1878	94	30	14	218
Wells, Temper-screw for oil .....	H. J. Miller .....	203, 751	May 14, 1878	554	156	13	802
Wells, Tool for extracting obstructions from deep .....	J. H. Luther .....	209, 486	Oct. 29, 1878	1131	530	14	662
Wells, Vacuum-packer for oil .....	J. C. Thomson .....	204, 512	June 4, 1878	85	29	13	1024
Wells, Water-packer for oil .....	W. W. Jamieson .....	207, 281	Aug. 20, 1878	601	196	14	296
Wells, Working-barrel for oil .....	E. E. Sweet .....	200, 357	Feb. 12, 1878	478	141	13	315
Wheat-heater .....	A. Fulton .....	209, 243	Oct. 22, 1878	874	254	14	622
Wheat-steaming apparatus .....	J. Burkholder .....	199, 690	Jan. 29, 1878	1036	302	13	193
Wheel:							
See Car-wheel.	Plow-wheel.						
Chain-wheel.	Ratchet-wheel.						
Contrate-wheel.	Tension-wheel.						
Current-wheel.	Turbine-wheel.						
Current and tide wheel.	Vehicle-wheel.						
Divided wheel.	Water-wheel.						
Emery-wheel.	Wind-wheel.						
Fifth-wheel.	Windmill-wheel.						
Paddle-wheel.							
Wheelbarrow .....	F. Dyer .....	207, 112	Aug. 20, 1878	488	146	14	274
Wheelbarrow .....	W. Eckert .....	199, 698	Jan. 29, 1878	1042	304	13	194
Wheelbarrow .....	J. Lennon .....	206, 955	Aug. 13, 1878	318	97	14	249
Wheelbarrow .....	J. W. Marshall .....	210, 701	Dec. 10, 1878	344	94	14	877

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Wheelbarrow	G. B. Tennent	207, 222	Aug. 20, 1878	598	180	14	288
Wheelbarrow, Metallic	J. Upstone	207, 225	Aug. 20, 1878	603	181	14	289
Wheels and pulleys, Mode and mechanism for testing the balance of.	T. C. Harris	209, 475	Oct. 29, 1878	1119	827	14	660
Whiffletree	R. R. Beavers	109, 894	Feb. 5, 1878	4	2	13	233
Whiffletree	A. Hance	203, 146	Apr. 30, 1878	1392	407	13	805
Whiffletree	E. D. Marsh	210, 463	Dec. 3, 1878	77	19	14	834
Whiffletree	A. E. Schatz	207, 686	Sept. 3, 1878	101	30	13	361
Whiffletree	S. J. White	210, 651	Dec. 10, 1878	297	81	14	871
Whiffletree attachment	R. W. Smalley	202, 199	Apr. 9, 1878	364	107	13	654
Whiffletree-hook	N. M. Bowen	204, 946	June 18, 1878	572	167	13	1095
Whiffletree-hook	D. A. Hagan	198, 739	Jan. 1, 1878	9	2	13	10
Whiffletree-hook	W. Heston	202, 437	Apr. 16, 1878	624	183	13	695
Whiffletree-hook	N. Hill	202, 649	Apr. 23, 1878	875	251	13	734
Whiffletree-hook	G. W. Jackman	201, 789	Mar. 26, 1878	1016	310	13	580
Whiffletree-hook	J. Marcellus	205, 402	June 25, 1878	1053	312	13	1163
Whiffletree-hook	W. S. Mead	205, 117	June 18, 1878	737	219	13	1117
Whiffletree-hook	E. E. Morse	205, 121	June 18, 1878	740	220	13	1117
Whiffletree-hook	M. M. Olin, A. Zwiebel, and W. A. Bennett.	204, 682	June 11, 1878	266	83	13	1033
Whiffletree-hook	O. J. Smith	205, 583	July 2, 1878	126	38	14	25
Whiffletree-iron	C. H. Palmer	210, 554	Dec. 3, 1878	177	47	14	846
Whiffletree-plato	B. S. Porter	210, 557	Dec. 3, 1878	179	48	14	847
Whiffletree plate and clevis	H. A. Luttgens	198, 771	Jan. 1, 1878	51	13	13	15
Whip	T. W. Rounds and T. L. Reed	202, 378	Apr. 16, 1878	569	106	13	687
Whip, Leather	E. B. Light	204, 985	June 18, 1878	609	178	13	1099
Whip-rack	S. A. Darrach	202, 794	Apr. 23, 1878	1021	293	13	752
Whip-rounding machine	H. Lombard	208, 249	Sept. 24, 1878	738	216	14	455
Whip-socket	F. Higgins	200, 945	Aug. 13, 1878	310	94	14	248
Whip-socket	A. H. Lau	199, 374	Jan. 22, 1878	687	202	13	131
Whip-socket	A. Searls	200, 671	Feb. 26, 1878	820	241	13	383
Whip-socket	A. Searls	202, 967	Apr. 30, 1878	1218	352	13	781
Whip-socket and rein-holder	E. Caswell	205, 785	July 9, 1878	363	105	14	58
Whip-socket and rein-holder	H. W. Neal	204, 072	May 21, 1878	903	259	13	954
Whip-socket and rein-holder combined	B. J. Downing	204, 149	May 28, 1878	997	283	13	969
Whirligig	H. D. Forbes	207, 649	Sept. 3, 1878	68	20	14	357
Whistle, Fog and alarm	J. B. Tarr	209, 200	Oct. 22, 1878	836	241	14	616
White-washing machine	J. P. Weber	206, 909	Aug. 13, 1878	279	85	14	244
Wick-raiser, Auxiliary	E. F. Morse	203, 063	Apr. 30, 1878	1304	379	13	793
Wick-tube	H. McConnell	207, 614	Sept. 3, 1878	30	10, 11	14	233
Wine and oil box	J. H. Livermore	206, 588	July 30, 1878	1288	370	14	187
Wind-engine	W. A. Aldrich	207, 701	Sept. 3, 1878	115	35	14	263
Wind-engine	L. Brayman	203, 884	May 21, 1878	700	209	13	928
Wind-engine	J. W. Cleland	204, 481	June 4, 1878	62	21	13	1021
Wind-engine	J. Cook	209, 862	Nov. 12, 1878	359	107	14	713
Wind-engine	H. sr. and H. Croft, jr	201, 334	Mar. 19, 1878	544	167	13	509
Wind-engine	J. B. Foster	201, 233	Mar. 12, 1878	417	129	13	484
Wind-engine	S. Hazer	205, 798	July 9, 1878	377	109	14	60
Wind-engine	F. Heavener	208, 616	Oct. 8, 1878	388	110	14	548
Wind-engine	H. N. Hill	204, 221	May 28, 1878	1088	310	13	981
Wind-engine	J. Hollingsworth	204, 044	May 21, 1878	574	250	13	950
Wind-engine	L. G. Kregel	205, 877	July 9, 1878	469	131	14	71
Wind-engine	J. Longyear and D. W. Clark	204, 345	May 28, 1878	1212	346	13	996
Wind-engine	J. T. Miller	208, 837	Oct. 8, 1878	413	129	14	552
Wind-engine	H. C. Miner	203, 480	May 7, 1878	257	74	13	656
Wind-engine	F. A. Mitchell	206, 815	Aug. 6, 1878	160	50, 51	14	286
Wind-engine	C. E. Myers	208, 841	Oct. 8, 1878	422	122	14	553
Wind-engine	I. H. Palmer	207, 545	Aug. 27, 1878	955	279	14	388
Wind-engine	D. R. Smith	206, 631	July 30, 1878	1328	362	14	192
Wind-engine	D. D. Wadsworth	205, 426	June 25, 1878	1075	318	13	1168
Wind-engine	D. C. Walling	209, 947	Nov. 12, 1878	446	135	14	744
Wind-engine	A. Zwiebel	205, 780	July 9, 1878	355	102	14	57
Wind-engines, Machine for storing the power of.	M. Everhart	205, 255	June 25, 1878	895	265	13	1142
Wind-wheel	M. Everhart	201, 400	Mar. 19, 1878	615	187	13	518
Wind-wheel	H. F. Hodges	207, 650	Sept. 3, 1878	78	23	14	369
Wind-wheel	S. W. Martin	207, 189	Aug. 20, 1878	564	169	14	284
Wind-wheel	A. Zwiebel	208, 453	Sept. 24, 1878	952	279	14	482
Winding and reeling cotton, silk, worsted, &c.	W. L. Bright, G. Ingham, and J. Fielding.	199, 348	Jan. 22, 1878	600	193	13	127
Winding and twisting machines, Stop-motion for	D. Smith	198, 956	Jan. 8, 1878	245	70, 71	13	54
Windlass	J. A. Pophrey	205, 900	July 9, 1878	484	138	14	74
Windlass for oil-wells	W. and G. Koch	208, 611	Oct. 1, 1878	155	45	14	510
Windlass, Portable hand	O. Frederickson	203, 333	May 7, 1878	101	29	13	834
Windlass, Wire-cable	J. P. Manton	203, 845	May 21, 1878	664	188	13	923
Windlasses, Brake for operating ships	L. Garrison	130, 283	Jan. 15, 1878	585	171	13	167
Windmill	J. Lunsin	209, 853	Nov. 12, 1878	351	105	14	722
Windmill	J. and J. B. Cushman	199, 190	Jan. 15, 1878	496	146	13	94
Windmill	G. B. Deane	201, 166	Mar. 12, 1878	349	167	13	474
Windmill	L. S. Dunlap	209, 334	Oct. 22, 1878	976	284	14	658
Windmill	W. Forbes	210, 772	Dec. 10, 1878	421	117	14	887
Windmill	F. Forster	205, 373	June 25, 1878	1624	303	13	1159
Windmill	G. Hodges	199, 345	Jan. 15, 1878	649	190	13	117
Windmill	S. E. Jarvis	202, 825	Apr. 23, 1878	1061	304	13	757
Windmill	T. E. Martin	210, 950	Dec. 17, 1878	638	176	14	923
Windmill	H. L. May	208, 254	Sept. 24, 1878	743	217	14	455
Windmill	O. H. Quie	201, 286	Mar. 12, 1878	476	146	13	492
Windmill	F. Robert	200, 874	Mar. 5, 1878	61	21	13	424
Windmill	F. W. Shellabarger	201, 560	Mar. 19, 1878	772	235	13	540
Windmill	T. N. Shephard	199, 473	Jan. 22, 1878	783	230	13	146
Windmill	E. S. Smith	208, 208	Sept. 17, 1878	678	199	14	443

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Windmill .....	S. H. Smith .....	199, 114	Jan. 8, 1878	405	119.	13	79
Windmill .....	A. T. Winchell .....	198, 829	Jan. 1, 1878	108	31	13	25
Windmill-motor .....	I. H. Palmer .....	210, 803	Dec. 10, 1878	452	127	14	891
Windmill-power, Mechanism for transmitting .....	J. S. Adams .....	199, 008	Jan. 8, 1878	299	88	13	62
Windmill-wheel .....	A. Klotz .....	200, 066	Feb. 5, 1878	175	56	13	260
Window .....	D. E. Cooke .....	200, 863	Nov. 12, 1878	360	108	14	733
Window .....	G. H. Gerken .....	209, 967	Mar. 5, 1878	89	31	13	429
Window .....	A. K. Phillips .....	209, 073	Oct. 15, 1878	685	198	14	591
Window-bead fastener .....	G. M. Evans .....	207, 262	Aug. 20, 1878	643	191		293
Window-cleaner .....	W. C. Gayton .....	202, 101	Apr. 9, 1878	259	76	13	640
Window-cleaning chair .....	A. Dormitzer .....	200, 441	Feb. 19, 1878	570	168	13	337
Window-cleaning device .....	E. P. Hall .....	200, 611	Feb. 26, 1878	757	222	13	373
Window-cleaning step-chair .....	A. Dormitzer .....	206, 935	Aug. 13, 1878	300	92	14	247
Window-cleaning step-chair .....	A. Dormitzer .....	206, 936	Aug. 13, 1878	301	92	14	247
Window, door, and shutter sprinkler, External .....	J. Bennison .....	207, 585	Aug. 27, 1878	778	232	14	317
Window-frame .....	M. Casey .....	199, 515	Jan. 22, 1878	826	241	13	153
Window-frame .....	C. Rebhun .....	208, 926	Oct. 15, 1878	520	151	14	570
Window hanging and fastening .....	J. Q. Ingham .....	200, 614	Feb. 26, 1878	759	223	13	373
Window-screen .....	A. Altenburg and W. C. Hill .....	201, 478	Mar. 19, 1878	687	210	13	529
Window-screen .....	J. Brizee .....	205, 95	July 16, 1878	601	173	14	94
Window-screen .....	E. T. Burrows .....	210, 495	Dec. 3, 1878	109	29	14	838
Window-screen .....	P. Finders .....	201, 512	Mar. 19, 1878	722	220	13	535
Window-screen .....	J. Kluncker .....	206, 181	July 23, 1878	816	233	14	124
Window-screen .....	E. L. Lloyd .....	205, 638	July 2, 1878	204	61	14	35
Window-screen .....	C. Matheny .....	199, 560	Jan. 22, 1878	873	255	13	161
Window-screen .....	D. H. Metcalf .....	208, 110	Sept. 17, 1878	570	170	14	430
Window-screen .....	E. Neary .....	207, 815	Sept. 10, 1878	245	77	14	383
Window-screen .....	G. L. Reynolds .....	204, 375	May 28, 1878	1244	354	13	1001
Window-screen .....	W. D. Stevens .....	202, 599	Apr. 16, 1878	801	231	13	716
Window-screen .....	R. J. Stuart .....	201, 714	Mar. 26, 1878	937	288	13	509
Window-screen .....	J. C. Walker and T. H. Hunt .....	199, 335	Jan. 15, 1878	639	186	13	115
Window-screen .....	F. W. Wood .....	206, 382	July 23, 1878	1054	303		153
Window-screen .....	H. E. Wookey .....	208, 700	Oct. 8, 1878	262	75	14	531
Window-shade .....	A. W. Lane .....	203, 468	May 7, 1878	246	71	13	854
Window-shade .....	T. H. Palling .....	201, 553	Mar. 19, 1878	766	233	13	540
Window-ventilator .....	G. R. Buttram .....	205, 999	July 16, 1878	605	174	14	94
Window-ventilator .....	L. D. Harvey .....	199, 438	Jan. 22, 1878	748	219	13	140
Window-ventilator .....	L. D. Harvey .....	205, 957	July 16, 1878	561	160	14	89
Windows and transoms, Device for operating .....	J. Kelly .....	199, 649	Jan. 29, 1878	996	290	13	187
Wire, Apparatus for finishing zinc-coated .....	E. H. Hill .....	204, 571	June 4, 1878	138	46	13	1032
Wire, Apparatus for manufacturing .....	W. Wilmshann .....	201, 582	Mar. 19, 1878	800	244	13	544
Wire-barbing instrument .....	L. Eberhart .....	207, 405	Aug. 27, 1878	798	237	14	319
Wire-barbing machine .....	F. Billings .....	204, 877	June 18, 1878	499	145	13	1085
Wire-barbing machine .....	F. Billings .....	209, 544	Nov. 5, 1878	6	2		681
Wire-barbing machine .....	T. B. Doolittle .....	199, 524	Jan. 22, 1878	838	245	13	155
Wire-barbing tool .....	M. Knickerbocker .....	208, 402	Sept. 24, 1878	893	261	14	475
Wire cable, Machine for making hollow .....	O. Preston .....	202, 961	Apr. 30, 1878	1211	350	13	780
Wire-coiling machine .....	C. E. Green .....	204, 030	May 21, 1878	864	247	13	949
Wire-coiling machine .....	W. F. Moody .....	206, 483	Aug. 6, 1878	31	8, 9	14	210
Wire-cutter .....	S. D. Locke .....	205, 108	June 18, 1878	728	217	13	1116
Wire cutting and bending machine .....	W. E. Stearns .....	200, 947	Mar. 5, 1878	124	41	13	434
Wire-cutting machine .....	J. Adt .....	203, 691	May 14, 1878	490	138	13	894
Wire-cutting machine .....	J. Adt .....	205, 027	June 18, 1878	649	191	13	1105
Wire-cutting tool .....	C. M. Knowles .....	205, 103	June 18, 1878	723	215	13	1115
Wire, Device for holding coils of .....	A. K. Hebard .....	203, 037	Apr. 30, 1878	1284	372	13	790
Wire-drawing .....	V. D. P. Kenerson and C. H. Morgan .....	203, 346	May 7, 1878	114	.....	13	835
Wire-drawing machine .....	J. S. Winsor .....	207, 330	Aug. 20, 1878	706	211	14	302
Wire, Forming and tempering .....	C. H. Morgan .....	207, 201	Aug. 20, 1878	578	173	14	285
Wire, &c., Machine for coiling .....	J. Prosser .....	206, 197	July 23, 1878	839	239	14	127
Wire, Machine for cutting threads on .....	E. F. Richardson .....	206, 688	Aug. 6, 1878	35	10	14	211
Wire, Machine for reducing and pointing .....	W. S. Whiting .....	202, 614	Apr. 16, 1878	818	236	13	718
Wire, Manufacture of .....	W. Bansen .....	204, 787	June 11, 1878	383	114	13	1067
Wire, Manufacture of .....	W. L. Reynolds and C. Haskell .....	205, 764	July 9, 1878	339	.....	14	55
Wire-rolling machine .....	D. Shaw and D. Spence .....	202, 670	Apr. 23, 1878	897	257	13	736
Wire-rolling machines, Guide for .....	W. W. McCallip .....	202, 848	Apr. 23, 1878	1084	310	13	760
Wire rope and cable .....	T. Hager .....	202, 812	Apr. 23, 1878	1045	300	13	755
Wire-rope machine .....	C. K. Pickles and R. Burns .....	209, 626	Nov. 5, 1878	97	28, 29	14	694
Wire-rope way .....	A. Blatchly .....	206, 700	Aug. 6, 1878	45	14	14	212
Wire-straightener .....	J. Adt .....	205, 601	July 2, 1878	140	43	14	27
Wire-stretcher .....	L. G. Ericson .....	207, 167	Aug. 20, 1878	540	162	14	281
Wire-tightener .....	W. W. Marsh and C. Bergqvist .....	208, 022	Sept. 17, 1878	484	145	14	419
Wire-work for paper-machines, Making seams in woven .....	J. Dunbar .....	199, 359	Jan. 22, 1878	674	197	13	129
Wiring and flanging machine .....	C. Claussen .....	210, 099	Nov. 12, 1878	625	185	14	772
Wood and sheet-metal box, Combined .....	J. W. Dowling .....	205, 739	July 9, 1878	312	91	14	52
Wood, Apparatus for steaming .....	G. Miles .....	200, 179	Oct. 22, 1878	816	236	14	614
Wood, Bending .....	H. C. White .....	207, 635	Sept. 3, 1878	51	16	14	355
Wood-bending machine .....	S. Swartz and J. R. Cross .....	198, 780	Jan. 1, 1878	62	16	13	17
Wood-burning furnace .....	H. A. Wood .....	207, 788	Sept. 3, 1878	207	64	14	375
Wood, Compound for filling the grain of .....	N. Wheeler .....	203, 304	May 7, 1878	76	.....	14	890
Wood-drying apparatus .....	H. Parker .....	202, 957	Apr. 30, 1878	1208	349	13	780
Wood, Manufacturing articles of .....	G. F. White .....	210, 229	Nov. 26, 1878	774	230	14	795
Wood-polishing machine .....	J. Creager .....	207, 717	Sept. 3, 1878	137	41	14	366
Wood, Preserving .....	A. B. Tripler .....	208, 649	Oct. 1, 1878	198	57	14	515
Wood receptacle and burning-fluid can, Combined kindling .....	S. H. Bradford .....	198, 788	Jan. 1, 1878	72	19	13	18
Wood-rosettes, Machine for making .....	J. H. Birschow .....	201, 742	Mar. 26, 1878	967	296	13	574
Wood-splitting machine .....	E. A. Hildreth .....	205, 550	July 2, 1878	90	25, 26	14	20
Wood, Staining .....	J. W. Hyatt .....	209, 598	Nov. 5, 1878	36	.....	14	685
Wood, Staining .....	A. B. Tripler .....	207, 630	Sept. 3, 1878	46	.....	14	355
Wood-work, Ornamental .....	H. P. Ostum .....	208, 420	Sept. 24, 1878	914	267	14	477

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Wood-worker, Universal .....	W. H. Doane and G. W. Bugbee	210,761	Dec. 10, 1878	407	112	11	885
Wood-worker, Universal .....	W. H. Doane and G. W. Bugbee	210,762	Dec. 10, 1878	409	113	14	885
Wood-worker, Universal .....	W. H. Doane and G. W. Bugbee	210,763	Dec. 10, 1878	412	114	14	886
Wood-working machinery, Attachment for .....	E. Conrad	210,919	Dec. 17, 1878	605	167	14	919
Wooden box .....	G. A. Mannie	205,280	June 25, 1878	919	272	13	1146
Wooden boxes, Machine for making .....	R. M. Williamson	204,870	June 11, 1878	471	137	13	1078
Wooden boxes, Machine for trimming .....	F. Myers	201,822	Mar. 26, 1878	1047	320	13	365
Wooden pins, Die for cutting .....	B. Chalfant	202,702	Apr. 23, 1878	930	268	13	740
Wooden pins, Machine for making .....	A. M. Kendall	206,882	Aug. 13, 1878	240	78	14	241
Wooden-pipe joint .....	W. N. Horton	206,177	July 23, 1878	812	232	14	124
Wool and cotton and similar animal and vegetable fiber from fabrics, Separating .....	J. Y. Slater	202,672	Apr. 23, 1878	899	258	13	736
Wool-burring machine .....	J. K. Proctor	208,493	Oct. 1, 1878	38	12	14	494
Wool-combing machine .....	S. Metcalfe	198,950	Jan. 8, 1878	240	68, 69	13	52
Wool on the pelt, Preparing and cleaning .....	P. Puech	207,774	Sept. 3, 1878	193	137	14	373
Wool-press .....	W. Tipton	205,013	June 18, 1878	635	187	13	1103
Wool-washing machine .....	W. H. Bradley	203,995	May 21, 1878	823	236	13	944
Wool-washing machine .....	J. Clerg	200,509	Feb. 19, 1878	635	187	13	347
Wool-washing machine .....	S. R. Parkhurst	204,503	June 4, 1878	77	27	13	1023
Wool-washing machine .....	F. P. Pendleton and J. K. Proctor	206,192	July 23, 1878	829	236	14	126
Wool-washing machine .....	F. G. Sargent	206,489	July 30, 1878	1186	341	14	174
Wool-washing machine .....	F. G. Sargent	209,138	Oct. 22, 1878	773	224	14	608
Work-bench attachment .....	J. M. Combs	207,504	Aug. 27, 1878	905	267	14	331
Work-box .....	P. B. Pickens	202,048	Apr. 2, 1878	188	55	13	625
Wort-cooling vat .....	J. Raiber	208,764	Oct. 8, 1878	332	94	14	540
Wort during fermentation, Apparatus for cooling .....	J. Raiber	208,763	Oct. 8, 1878	331	94	14	540
Woven fabrics, Tubular .....	S. W. Baker	200,965	Mar. 5, 1878	140	48	13	437
Wreaths, Machine for twining .....	G. B. Shepard	209,100	Oct. 15, 1878	714	207	14	595
Wrench:							
See Axle-nut wrench. Nut and tap wrench.							
Bung-wrench. Pipe-wrench.							
Carriage-wrench. Ratchet-wrench.							
Hub-wrench. Tap-wrench.							
Wrench .....	A. Beck	208,057	Sept. 17, 1878	521	155	14	424
Wrench .....	A. Berdan and A. E. Warren	200,971	Mar. 5, 1878	149	48	13	438
Wrench .....	J. S. Birch	203,581	May 14, 1878	381	108	13	881
Wrench .....	J. S. Birch	208,050	Sept. 17, 1878	522	156	14	424
Wrench .....	H. W. Brett	207,709	Sept. 3, 1878	126	39	14	355
Wrench .....	G. S. Goodspeed	203,262	May 7, 1878	26	9	13	824
Wrench .....	H. H. Hill	206,733	Aug. 6, 1878	76	25	14	216
Wrench .....	C. W. Hilton	202,259	Apr. 9, 1878	425	124	13	663
Wrench .....	J. W. Hyatt	209,509	Nov. 5, 1878	36	10	14	685
Wrench .....	J. M. Marly	207,814	Sept. 10, 1878	245	77	14	583
Wrench .....	T. H. Phillips	202,582	Apr. 16, 1878	783	226	13	714
Wrench .....	S. Schwerdt	200,348	Feb. 12, 1878	470	138	13	313
Wrench .....	J. H. Sievers and H. T. Winkler	204,386	May 28, 1878	1253	897	13	1002
Wrench and saw-set combined .....	J. Backer	199,480	Jan. 22, 1878	796	234	13	148
Wrench attachment .....	H. F. Read	203,774	May 14, 1878	578	162	13	905
Wringer:							
See Clothes-wringer. Mop-wringer.							
Wringer .....	H. E. Smith	204,852	June 11, 1878	451	132	13	1075
Wringer .....	J. Todd	210,170	Nov. 19, 1878	697	208	14	782
Wringers, Uniting the rubber rolls of .....	H. N. Strong	209,781	Nov. 12, 1878	273	81	14	722
Wringing-machine .....	I. Copeland	203,818	May 21, 1878	637	179	13	820
Wringing-machine roll .....	G. P. Clark	202,902	Apr. 30, 1878	1239	856	13	784
Y.							
Yarn into hanks, Device for twisting .....	B. S. and A. Jennings	200,917	Mar. 5, 1878	98	33	13	430
Yeast-cakes, Machine for making .....	A. E. Spencer	208,272	Sept. 24, 1878	764	228	14	458
Yoke adjuster, Neck .....	J. Dalton	205,249	June 25, 1878	890	264	13	1142
Yoke and combined draft-tongue and equalizer, Neck .....	R. Atkin	199,174	Jan. 15, 1878	479	141	13	91
Yoke clip, Neck .....	W. W. Langer	205,110	June 18, 1878	731	217	13	1116
Yoke coupling, Neck .....	C. Eckes	208,012	Sept. 17, 1878	473	142	14	417
Yoke fastener, Neck .....	A. W. Comstock	200,643	Feb. 26, 1878	791	233	13	378
Yoke, Neck .....	J. Heimerl	199,543	Jan. 22, 1878	859	251	13	158
Yoke, Ox .....	M. T. Perkins	205,761	July 9, 1878	336	98	14	55
Yucca, Machine for mashing .....	A. Stoner	203,386	May 7, 1878	159	46	13	842
Z.							
Zinc ores, Treating .....	E. A. Parnell	203,849	May 21, 1878	668	252	13	924
Zinc sulphate, Utilizing .....	C. Fahlberg	200,134	Feb. 12, 1878	252	252	13	281



## ALPHABETICAL LIST OF DESIGNS.

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<b>A.</b>					
Advertising-monument.....	J. B. Turner.....	10, 649	Apr. 23, 1878	13	730
<b>B.</b>					
Badge.....	J. Fallows.....	10, 540	Mar. 19, 1878	13	501
Badge.....	H. Moesinger.....	10, 629	Apr. 16, 1878	13	678
Badge.....	R. Kinckwitz.....	10, 528	Mar. 12, 1878	13	458
Badge.....	E. Williams.....	10, 711	June 4, 1878	13	1022
Badge.....	R. O. Wood.....	10, 636	Apr. 16, 1878	13	678
Basket, Car.....	A. S. Brownell.....	10, 744	July 9, 1878	14	48
Bedstead.....	J. Dawson.....	10, 936	Dec. 3, 1878	14	824
Bell, Hand.....	J. P. Connell.....	10, 921	Nov. 26, 1878	14	788
Bible-cover.....	F. M. Dillie.....	10, 943	Dec. 3, 1878	14	824
Billiard-table leg.....	H. W. Collender.....	10, 637	Apr. 16, 1878	13	678
Billiard-table leg.....	H. H. Holly.....	10, 638	Apr. 16, 1878	13	678
Billiard-table leg.....	O. Norman.....	10, 639	Apr. 16, 1878	13	678
Blind-lift.....	J. L. Howard.....	10, 926	Nov. 26, 1878	14	788
Boot, Rubber.....	J. Banigan.....	10, 856	Oct. 1, 1878	14	488
Bottle.....	R. M. Atwater.....	10, 407	Jan. 22, 1878	13	126
Bottle.....	L. Geistodt.....	10, 709	June 4, 1878	13	1022
Bottle.....	C. A. Tatum.....	10, 375-10, 676	May 7, 1878	13	820
Bottle, Perfumery.....	M. C. Hood.....	10, 716	June 11, 1878	13	1048
Bottle, Perfumery.....	G. Storm.....	10, 607	Mar. 26, 1878	13	550
Box.....	M. I. Weller.....	10, 885-10, 886	Oct. 29, 1878	14	636
Bracelet.....	W. Byron.....	10, 612	Apr. 2, 1878	13	598
Bracelet.....	W. Byron.....	10, 677	May 14, 1878	13	872
Bracelet.....	C. H. Graef.....	10, 415	Jan. 29, 1878	13	179
Bracelet.....	C. H. Graef.....	10, 416	Jan. 29, 1878	13	179
Bracelet.....	J. A. Hedstrom.....	10, 642	Apr. 16, 1878	13	678
Breastpin.....	G. D. Briggs.....	10, 652	Apr. 30, 1878	13	774
Breastpin.....	W. Britton.....	10, 620	Apr. 9, 1878	13	638
Breastpin.....	H. S. Somes.....	10, 960	Dec. 10, 1878	14	862
Brick, Ornamental corner and cornice.....	N. Larson.....	10, 738	July 2, 1878	14	8
Bridles, Brow-band for.....	F. Meinberg.....	10, 523	Mar. 12, 1878	13	458
Brooch.....	H. Howard.....	10, 842	Sept. 24, 1878	14	450
Brooch.....	H. Howard.....	10, 914	Nov. 19, 1878	14	750
Brooch.....	S. C. Howard.....	10, 958	Dec. 10, 1878	14	862
Buckle.....	F. Crane.....	10, 704	May 28, 1878	13	970
Buckle.....	E. A. Smith.....	10, 690	May 21, 1878	13	918
Buckle.....	D. L. Smith.....	10, 682-10, 683	May 14, 1878	13	872
Burial-casket molding.....	A. H. Nirdlinger.....	10, 611	Mar. 26, 1878	13	550
Burial-casket.....	A. H. Nirdlinger.....	10, 776	Aug. 13, 1878	14	236
Burial-casket.....	W. J. Noble.....	10, 630	Apr. 16, 1878	13	678
Bust.....	A. Bartholdi.....	10, 893	Nov. 5, 1878	14	680
Button.....	G. C. Britner.....	10, 391	Jan. 8, 1878	13	48
Button.....	J. H. Wilson.....	10, 845	Sept. 24, 1878	14	450
Button, &c.....	J. W. and I. M. Miller.....	10, 830-10, 833	Sept. 17, 1878	14	416
Button, Sleeve.....	A. W. Sturdy.....	10, 503	Feb. 26, 1878	13	370
Button, stud, &c.....	J. W. and I. M. Miller.....	10, 522	Mar. 12, 1878	13	458
Buttons, studs, and other jewelry.....	J. W. and I. M. Miller.....	10, 403	Jan. 15, 1878	13	11
<b>C.</b>					
Caddy.....	E. Norton.....	10, 542	Mar. 19, 1878	13	501
Candy, Stick.....	G. M. Mills.....	10, 882-10, 883	Oct. 29, 1878	14	636
Canister or caddy front.....	E. Morgan, jr.....	10, 394	Jan. 8, 1878	13	48
Canister or caddy, Tea.....	E. Morgan, jr.....	10, 393	Jan. 8, 1878	13	48
Card, Molded.....	J. Hollely.....	10, 879	Oct. 22, 1878	14	602
Card, Playing.....	J. W. Nunen.....	10, 789	Aug. 27, 1878	14	310
Carriage running-gear, Baby.....	A. Shoeninger.....	10, 938	Dec. 3, 1878	14	824
Cassimere.....	F. Carpenter.....	10, 613	Apr. 2, 1878	13	598
Cassimere.....	T. E. Hopkins.....	10, 386	Jan. 1, 1878	13	7
Cassimere, Fancy.....	F. S. Bosworth.....	10, 692-10, 702	May 28, 1878	13	970
Carpet.....	R. Allan.....	10, 443-10, 444	Feb. 12, 1878	13	278
Carpet.....	R. Allan.....	10, 714	June 11, 1878	13	1048
Carpet.....	F. E. Allen.....	10, 398	Jan. 15, 1878	13	11
Carpet.....	H. Barclay.....	10, 399	Jan. 15, 1878	13	11
Carpet.....	J. H. Bromley.....	10, 710	June 4, 1878	13	1022
Carpet.....	H. Christie.....	10, 778	Aug. 13, 1878	14	236
Carpet.....	E. Daniel.....	10, 400	Jan. 15, 1878	13	11
Carpet.....	W. De Hart.....	10, 451	Feb. 19, 1878	13	326
Carpet.....	E. Fisher.....	10, 468-10, 473	Feb. 19, 1878	13	326
Carpet.....	J. Fisher.....	10, 452-10, 467	Feb. 19, 1878	13	326
Carpet.....	J. L. Folsom.....	10, 550-10, 176	Mar. 26, 1878	13	550
Carpet.....	J. L. Folsom.....	10, 798-10, 804	Sept. 10, 1878	14	380
Carpet.....	E. Guirand.....	10, 514	Mar. 12, 1878	13	458
Carpet.....	E. Guireau.....	10, 666	May 7, 1878	13	820
Carpet.....	A. Heald.....	10, 735-10, 737	July 2, 1878	14	8
Carpet.....	O. Heinigke.....	10, 577-10, 582	Mar. 26, 1878	13	550
Carpet.....	O. Heinigke.....	10, 806-10, 812	Sept. 10, 1878	14	380
Carpet.....	H. Horan.....	10, 583-10, 592	Mar. 26, 1878	13	550
Carpet.....	H. Horan.....	10, 610	Mar. 26, 1878	13	550

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Carpet	H. Horan	10, 813-10, 818	Sept. 10, 1878	14	389
Carpet	W. B. Kendall	10, 519	Mar. 12, 1878	13	458
Carpet	D. C. Kirschner	10, 474	Feb. 19, 1878	13	326
Carpet	C. Magee	10, 779-10, 780	Aug. 13, 1878	14	236
Carpet	C. Magee	10, 870	Oct. 15, 1878	14	562
Carpet	J. Magee	10, 874	Oct. 22, 1878	14	602
Carpet	W. McCallum	10, 543	Mar. 19, 1878	13	501
Carpet	W. McCallum	10, 888	Oct. 29, 1878	14	636
Carpet	D. McNair	10, 402	Jan. 15, 1878	13	11
Carpet	J. Neil	10, 781	Aug. 13, 1878	14	236
Carpet	J. Neil	10, 875	Oct. 22, 1878	14	602
Carpet	E. J. Ney	10, 475-10, 488	Feb. 19, 1878	13	326
Carpet	H. Nordman	10, 541	Mar. 19, 1878	13	501
Carpet	H. Nordmann	10, 819	Sept. 10, 1878	14	389
Carpet	W. A. Pardoe	10, 449	Feb. 12, 1878	13	278
Carpet	G. W. Piggott	10, 544	Mar. 19, 1878	13	501
Carpet	G. W. Piggott	10, 820-10, 822	Sept. 10, 1878	14	580
Carpet	E. Pyne	10, 708	June 4, 1878	13	1022
Carpet	E. Pyne	10, 889	Oct. 29, 1878	14	636
Carpet	J. E. Rollings	10, 598-10, 603	Mar. 26, 1878	13	559
Carpet	J. E. Rollings	10, 823	Sept. 10, 1878	14	389
Carpet	J. H. Smith	10, 547-10, 548	Mar. 19, 1878	13	501
Carpet	W. H. Smith	10, 545-10, 546	Mar. 19, 1878	13	501
Carpet	T. J. Stearns	10, 529-10, 530	Mar. 12, 1878	13	458
Carpet	T. J. Stearns	10, 605-10, 606	Mar. 26, 1878	13	559
Carpet	T. J. Stearns	10, 633	Apr. 16, 1878	13	678
Carpet	T. J. Stearns	10, 674	May 7, 1878	13	820
Carpet	T. J. Stearns	10, 739	July 2, 1878	14	8
Carpet	T. J. Stearns	10, 839	Sept. 17, 1878	14	416
Carpet	T. J. Stearns	10, 876	Oct. 22, 1878	14	602
Carpet	C. W. Swapp	10, 490-10, 493	Feb. 19, 1878	13	326
Carpet	C. W. Swapp	10, 835-10, 838	Sept. 17, 1878	14	416
Carpet	C. Uster	10, 494	Feb. 19, 1878	13	326
Carpet	C. Uster	10, 713	June 4, 1878	13	1022
Carpeting	R. Allan	10, 846	Oct. 1, 1878	14	488
Carpeting	E. Petit	10, 790	Aug. 27, 1878	14	310
Carpeting	E. Petit	10, 849-10, 850	Oct. 1, 1878	14	488
Cigar-box	S. Belmont	10, 854-10, 855	Oct. 1, 1878	14	488
Cigar-box	E. Hantsche	10, 873	Oct. 22, 1878	14	602
Cigar-box	G. Jacoby	10, 828	Sept. 10, 1878	14	389
Cigar-box	A. Moonelis	10, 863	Oct. 8, 1878	14	525
Cigar-box	I. Simons	10, 968	Dec. 17, 1878	14	994
Cigar-box	M. Stockhausen and W. Beckind	10, 730	June 18, 1878	13	1084
Cigar-box	M. I. Weller and G. R. Repetti	10, 871	Oct. 15, 1878	14	562
Cigar-box	M. I. Weller and G. R. Repetti	10, 970	Dec. 17, 1878	14	994
Cigar-box	Fuller and J. A. Brown	10, 707	June 4, 1878	13	1022
Cigarettes, Paper case for	A. Pearl	10, 750	July 9, 1878	14	48
Chair	G. M. Harwood and R. Wood	10, 766	Aug. 6, 1878	14	206
Chair	C. Penchard	10, 594-10, 597	Mar. 26, 1878	13	559
Chair and parlor suite coverings	J. H. Travis	10, 935	Nov. 26, 1878	14	788
Chair and parlor suite coverings	J. H. Travis	10, 969	Dec. 17, 1878	14	994
Chairs, &c., Covering for	J. H. Travis	10, 753	July 9, 1878	14	48
Chain, Ornamental	D. A. Beam	10, 619	Apr. 9, 1878	13	638
Chain, Ornamental	D. A. Beam	10, 841	Sept. 24, 1878	14	450
Chandelier	T. R. Davis	10, 853	Oct. 1, 1878	14	488
Chess-men	W. E. Parker	10, 508	Mar. 5, 1878	13	419
Chimney-cap and ventilator	D. B. Rich	10, 895	Nov. 5, 1878	14	689
Clock-case	N. L. Bradley	10, 742	July 9, 1878	14	48
Clock-case	H. J. Davies	10, 689	May 21, 1878	13	918
Clock-case	M. C. Jones	10, 628	Apr. 16, 1878	13	678
Clock-face	G. Ager	10, 625	Apr. 16, 1878	13	678
Clock-front	H. R. Frisbie	10, 857-10, 858	Oct. 1, 1878	14	488
Coffin-handle	M. H. Crane	10, 909	Nov. 19, 1878	14	750
Coffin-handle	W. R. McComas	10, 791	Aug. 27, 1878	14	310
Coffin-handle	W. M. Smith	10, 755	July 16, 1878	14	86
Coffin-plate	W. C. Beattie	10, 884	Oct. 29, 1878	14	636
Coffin-plate	A. Fatoux	10, 890-10, 892	Oct. 29, 1878	14	636
Coffin-rail	J. R. Reed	10, 404	Jan. 15, 1878	13	11
Coffin-screw	J. R. Reed	10, 410	Jan. 22, 1878	13	128
Coffin-screw	J. W. Rogers	10, 834	Sept. 17, 1878	14	416
Coffin-screw	W. M. Smith	10, 927	Nov. 26, 1878	14	788
Collar and cuff box	A. N. Luchs	10, 435	Feb. 5, 1878	13	232
Counterpane or quilt	W. O'Hanlon	10, 786	Aug. 20, 1878	14	272
Cracker	C. S. Fowler and L. A. Rockwell	10, 765	Aug. 6, 1878	14	206
Crayon	J. W. Swartz	10, 608	Mar. 26, 1878	13	559
Crochet-fabric	C. A. Burnham	10, 626	Apr. 16, 1878	13	678
Crochet-stitch	C. A. Burnham	10, 760	July 30, 1878	14	169
Crocheted hood	E. M. Ackerman	10, 847	Oct. 1, 1878	14	488
Crocheted jacket	J. Holmes	10, 937	Dec. 3, 1878	14	824
Crocheted jacket, Sleeveless	J. Holmes	10, 445	Feb. 12, 1878	13	278
Crocheted jacket, Sleeveless	J. Holmes	10, 973	Dec. 17, 1878	14	994
Cuff	W. Barker	10, 500	Feb. 26, 1878	13	370
Cuff	R. S. Norton	10, 535	Mar. 12, 1878	13	458
<b>D.</b>					
Dish-handle	J. W. Burgess	10, 501	Feb. 26, 1878	13	370
Dishes, Handle for covered	J. Barlow and J. Moses	10, 538	Mar. 19, 1878	13	501
Dish, Handled	C. A. Rogers	10, 911	Nov. 19, 1878	14	750
Drawer, Furniture	E. Hart	10, 717	June 11, 1878	13	1048
Drawers, &c., Pull for	G. W. Tucker	10, 920	Nov. 19, 1878	14	750
Drawers, &c., Pull for	G. W. Tucker	10, 928	Nov. 26, 1878	14	788
Dress, Child's	J. McNeven	10, 634	Apr. 16, 1878	13	678

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Fabric.....	C. Heritage.....	10, 754	July 16, 1878	14	86
Font, Holy-water.....	T. Lloyd.....	10, 894	Nov. 5, 1878	14	680
Forks, spoons, knives, &c., Handles for.....	W. C. Beattie.....	10, 615	Apr. 2, 1878	13	598
Fountain-basin or flower-bed.....	W. Tweedale.....	10, 418	Jan. 29, 1878	13	179
Fringe.....	E. Greasley.....	10, 720	June 11, 1878	13	1048
Funeral ornament.....	C. H. Learned.....	10, 881	Oct. 29, 1878	14	636
Funeral ornament.....	C. E. McFarlan.....	10, 784	Aug. 20, 1878	14	272
Funeral ornament.....	W. M. Smith.....	10, 396	Jan. 8, 1878	13	4
G.					
Gem-setting.....	C. A. Faas.....	10, 732	June 25, 1878	13	1130
Glass and lava ware.....	F. S. Shirley.....	10, 729	June 18, 1878	13	1084
Glass shade.....	J. H. Hobbs.....	10, 502	Feb. 26, 1878	13	370
Glass table-set, Pressed.....	A. H. Boggs.....	10, 706	June 4, 1878	13	1022
Glass vessel, Combined.....	F. C. Winship.....	10, 954	Dec. 10, 1878	14	862
Glassware.....	T. B. Atterbury.....	10, 643	Apr. 23, 1878	13	730
Glassware.....	G. W. Blair.....	10, 743	July 9, 1878	14	48
Glassware.....	H. Franz.....	10, 731	June 25, 1878	13	1130
Glassware.....	J. H. Hobbs.....	10, 392	Jan. 8, 1878	13	48
Glassware.....	J. E. Miller.....	10, 727	June 18, 1878	13	1084
Glassware.....	M. Smith.....	10, 688	May 21, 1878	13	918
Glassware, Ornamentation of.....	H. Franz.....	10, 887	Oct. 29, 1878	14	636
H.					
Hammer.....	H. Hammond.....	10, 656	Apr. 30, 1878	13	774
Handkerchief.....	J. Grimshaw.....	10, 703	May 28, 1878	13	970
Handkerchief.....	J. Grimshaw.....	10, 866-10, 867	Oct. 15, 1878	14	562
Handkerchief-border.....	J. Grimshaw.....	10, 944	Dec. 3, 1878	14	824
Handle.....	W. R. McComas.....	10, 974	Dec. 17, 1878	14	904
Harness-trimming.....	S. Wiener.....	10, 406	Jan. 15, 1878	13	11
Hat and coat rack.....	J. O. Montignani.....	10, 762-10, 763	July 30, 1878	14	160
Heater, Fire-place.....	W. Burrows.....	10, 424	Jan. 29, 1878	13	179
Hinge.....	N. H. Camp.....	10, 715	June 11, 1878	13	1048
Hinge.....	C. B. Clark.....	10, 864	Oct. 8, 1878	14	526
Hinge.....	A. Culbert.....	10, 539	Mar. 19, 1878	13	501
Hobby-horse.....	O. Unzicker.....	10, 734	June 25, 1878	13	1130
I.					
Inkstand.....	S. Clark.....	10, 413	Jan. 29, 1878	13	179
Inkstand.....	O. F. Fogelstrand.....	10, 397	Jan. 8, 1878	13	48
Inkstand.....	O. F. Fogelstrand.....	10, 793	Sept. 3, 1878	14	348
Inkstand-frame.....	W. A. Hull.....	10, 655	Apr. 30, 1878	13	774
Inkstand-holder.....	A. Patitz.....	10, 908	Nov. 12, 1878	14	716
J.					
Jewel-case.....	E. H. Zoepfel.....	10, 651	Apr. 23, 1878	13	730
Jewelry, Cabinet.....	W. A. L. Miller.....	10, 650	Apr. 23, 1878	13	730
Jewelry, Ornament for.....	G. H. Draper.....	10, 896	Nov. 5, 1878	14	680
Jewelry, Ornamental trimming for.....	A. E. Coddling.....	10, 848	Oct. 1, 1878	14	488
Jewelry, Set of.....	A. Steinau, jr.....	10, 648	Apr. 23, 1878	13	730
K.					
Knitted fabric.....	E. B. Nyholm.....	10, 389	Jan. 1, 1878	13	7
L.					
Lace fabric.....	A. G. Jennings.....	10, 387	Jan. 1, 1878	13	7
Lace fabric, Fringed.....	W. P. Jennings.....	10, 448	Feb. 12, 1878	13	278
Lace purling.....	A. G. Jennings.....	10, 388	Jan. 1, 1878	13	7
Lamp.....	A. H. Benton.....	10, 434	Feb. 5, 1878	13	232
Lamp-chimney.....	S. W. Fowler.....	10, 414	Jan. 29, 1878	13	179
Lamp-fixture, Extension.....	F. R. Seidensticker.....	10, 686	May 21, 1878	13	918
Lamp, Pocket.....	C. S. Talmadge.....	10, 773	Aug. 6, 1878	14	206
Lamp-shade.....	R. Hemingray.....	10, 678	May 14, 1878	13	872
Lamp, Street or park.....	G. D. Burton.....	10, 497	Feb. 19, 1878	13	326
Letter-box.....	F. Keil.....	10, 910	Nov. 19, 1878	14	750
Lifting-handle.....	N. Hayden.....	10, 401	Jan. 15, 1878	13	11
M.					
Match-safe.....	J. H. Davis.....	10, 644	Apr. 23, 1878	13	730
Metallophone.....	C. M. Raymond.....	10, 972	Dec. 17, 1878	14	904
Mirror-frame.....	E. V. Blasius.....	10, 405	Jan. 15, 1878	13	11
Mirror-frame.....	W. S. Kreps.....	10, 746-10, 749	July 9, 1878	14	48
Muff.....	C. Stattman.....	10, 617	Apr. 2, 1878	13	598
O.					
Oil-cloth.....	H. J. Hoffman.....	10, 533-10, 534	Mar. 12, 1878	13	458
Oil-cloth.....	J. Hutchinson.....	10, 515-10, 516	Mar. 12, 1878	13	458
Oil-cloth.....	C. T. and V. E. Meyer.....	10, 425-10, 433	Jan. 29, 1878	13	179
Oil-cloth.....	C. T. and V. E. Meyer.....	10, 437-10, 442	Feb. 5, 1878	13	232
Oil-cloth.....	C. T. and V. E. Meyer.....	10, 658-10, 663	Apr. 30, 1878	13	774
Oil-cloth.....	C. T. and V. E. Meyer.....	10, 670-10, 672	May 7, 1878	13	820
Oil-cloth.....	C. T. and V. E. Meyer.....	10, 721-10, 724	June 11, 1878	13	1048
Oil-cloth.....	C. T. and V. E. Meyer.....	10, 770-10, 772	Aug. 6, 1878	14	206
Oil-cloth.....	C. T. and V. E. Meyer.....	10, 794-10, 795	Sept. 3, 1878	14	348
Oil-cloth.....	C. T. and V. E. Meyer.....	10, 900-10, 905	Nov. 12, 1878	14	716

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Oil-cloth.....	C. T. and V. E. Meyer.....	10, 946-10, 952	Dec. 10, 1878	14	862
Oil-cloth.....	T. E. Pennell.....	10, 526-10, 527	Mar. 12, 1878	13	458
Oil-cloth.....	F. Plock.....	10, 385	Jan. 1, 1878	13	7
Oil-cloth.....	C. M. Post.....	10, 525	Mar. 12, 1878	13	458
Organ-case.....	R. W. Blake.....	10, 792	Sept. 3, 1878	14	348
Organ-case.....	S. Hayward.....	10, 635	Apr. 16, 1878	13	678
Organ-case.....	J. R. Lomas.....	10, 593	Mar. 26, 1878	13	550
Organ-case.....	J. R. Lomas.....	10, 604	Mar. 26, 1878	13	550
Organ-case.....	J. B. Woodford.....	10, 510	Mar. 5, 1878	13	410
Overshoe.....	G. Watkinson.....	10, 774	Aug. 6, 1878	14	206
P.					
Package.....	S. Kimberly.....	10, 647	Apr. 23, 1878	13	730
Padlock.....	J. Gérard.....	10, 877	Oct. 22, 1878	14	602
Padlock.....	J. Gérard.....	10, 913	Nov. 19, 1878	14	750
Padlock.....	H. R. Towne and W. H. Taylor.....	10, 843	Sept. 24, 1878	14	450
Paper, Writing.....	H. C. Bainbridge.....	10, 897	Nov. 12, 1878	14	716
Paper, Writing.....	M. H. Pirie.....	10, 640-10, 641	Apr. 16, 1878	13	678
Pattern for ornamenting fabrics.....	J. Cochrane, jr.....	10, 826	Sept. 10, 1878	14	380
Pen case, Fountain.....	I. W. Heyinger.....	10, 653	Apr. 30, 1878	13	774
Pencil-case.....	J. M. Clark.....	10, 880	Oct. 29, 1878	14	636
Pencil-case.....	C. W. Gessner.....	10, 872	Oct. 22, 1878	14	602
Pendulum-weight.....	G. Hoyting.....	10, 627	Apr. 16, 1878	13	678
Piano.....	C. F. T. Steinway.....	10, 740	July 2, 1878	14	8
Piano-case.....	J. R. Lomas.....	10, 520	Mar. 12, 1878	13	458
Pianos, Case of upright.....	G. M. Guild.....	10, 498	Feb. 19, 1878	13	326
Piano-forte case, Upright.....	C. F. T. Steinway.....	10, 741	July 2, 1878	14	8
Pistol-handle.....	G. H. Harrington and W. A. Richardson.....	10, 621	Apr. 9, 1878	13	638
Pistol-handle.....	G. H. Harrington and W. A. Richardson.....	10, 646	Apr. 23, 1878	13	730
Pistol-handle.....	D. B. Wesson.....	10, 421-10, 423	Jan. 29, 1878	13	179
Plush and other goods.....	T. Goodall.....	10, 758-10, 759	July 23, 1878	14	120
Pocket-book frame.....	L. Prahar.....	10, 409	Jan. 22, 1878	13	126
R.					
Radiator-base.....	M. H. Crane.....	10, 922	Nov. 26, 1878	14	788
Range, Cooking.....	N. S. Vedder and T. S. Heister.....	10, 940	Dec. 3, 1878	14	824
Rocking-chair.....	E. A. Fuchs.....	10, 924	Nov. 26, 1878	14	788
Rocking-chair.....	S. Willershausen.....	10, 782	Aug. 13, 1878	14	237
Rocking-chair frame.....	S. Willershausen and F. Rhoner.....	10, 511	Mar. 5, 1878	13	410
Rubber fabric.....	A. O. Bourn.....	10, 390	Jan. 8, 1878	13	48
S.					
Saddle.....	R. E. Whitman.....	10, 844	Sept. 24, 1878	14	450
Sample-box.....	E. L. Wittgus.....	10, 614	Apr. 2, 1878	13	586
Sash and blind trimmings.....	J. L. Howard.....	10, 925	Nov. 26, 1878	14	788
Scarf.....	H. G. Fisk.....	10, 506	Mar. 5, 1878	13	410
Scarf-pin.....	H. Griffith.....	10, 645	Apr. 23, 1878	13	730
Screw, Casket.....	C. B. Rogers and J. S. Huggins.....	10, 631	Apr. 16, 1878	13	678
Sewing-machine bracket-arm.....	G. S. Darling.....	10, 764	Aug. 6, 1878	14	206
Sewing-machines, Leg-frame of.....	E. S. Jones.....	10, 829	Sept. 17, 1878	14	416
Sheet-metal water-pipe.....	J. F. Starr, jr.....	10, 632	Apr. 16, 1878	13	678
Shirt-bosom.....	J. H. Marley.....	10, 966	Dec. 17, 1878	14	904
Shirt-front.....	J. Hope.....	10, 499	Feb. 19, 1878	13	326
Shoe.....	J. F. Emerson.....	10, 757	July 23, 1878	14	120
Shoe.....	J. Kenz and G. Kraft.....	10, 959	Dec. 10, 1878	14	862
Shovel-handle.....	C. T. Bebee.....	10, 532	Mar. 12, 1878	13	458
Skirt.....	H. Galashan.....	10, 805	Sept. 10, 1878	14	380
Sled.....	A. Shoeninger.....	10, 939	Dec. 3, 1878	14	824
Spoon.....	J. M. Culver.....	10, 859-10, 860	Oct. 8, 1878	14	526
Spoon.....	J. Hammarth.....	10, 654	Apr. 30, 1878	13	774
Spoon.....	H. W. Hirschfeld.....	10, 788	Aug. 27, 1878	14	310
Spoon.....	H. Vasseur.....	10, 756	July 16, 1878	14	86
Spoon.....	H. Vasseur.....	10, 861	Oct. 8, 1878	14	526
Spoon.....	H. L. Wallace.....	10, 504	Feb. 26, 1878	13	370
Spoon.....	H. L. Wallace.....	10, 664	Apr. 30, 1878	13	774
Spoon and fork handle.....	G. W. Hull.....	10, 878	Oct. 22, 1878	14	602
Spoon and fork handle.....	E. C. Moore.....	10, 524	Mar. 12, 1878	13	458
Spoon and fork handle.....	C. F. Richers.....	10, 536-10, 537	Mar. 12, 1878	13	458
Spoon and fork handle.....	G. Wilkinson.....	10, 420	Jan. 29, 1878	13	179
Spoon-handle.....	S. J. Ladd.....	10, 521	Mar. 12, 1878	13	458
Spoon-handle.....	H. Vasseur.....	10, 691	May 21, 1878	13	918
Spoons, forks, &c., Handles for.....	G. Gill and E. L. Brittin.....	10, 609	Mar. 26, 1878	13	550
Spoons, forks, knives, &c., Handle for.....	C. F. Richers.....	10, 912	Nov. 19, 1878	14	750
Spoons, ladles, &c., Handles of.....	M. Morgans, jr.....	10, 436	Feb. 5, 1878	13	232
Statuary, Group of.....	J. Rogers.....	10, 719	June 11, 1878	13	1048
Statuary, Group of.....	J. Rogers.....	10, 869	Oct. 15, 1878	14	582
Statuary, Group of.....	J. Rogers.....	10, 956	Dec. 10, 1878	14	862
Statuette.....	G. S. Barkentin.....	10, 513	Mar. 12, 1878	13	458
Statuette.....	T. H. Bartlett.....	10, 505	Mar. 5, 1878	13	410
Steam-engine frame.....	C. Tyson.....	10, 840	Sept. 17, 1878	14	410
Stocking.....	R. M. Appleton.....	10, 797	Sept. 10, 1878	14	380
Stocking.....	M. Landenberger.....	10, 761	July 30, 1878	14	160
Stool leg, Piano.....	G. W. Archer.....	10, 705	June 4, 1878	13	1022
Stove.....	A. T. Bennett.....	10, 852	Oct. 1, 1878	14	488
Stove.....	A. J. Redway.....	10, 728	June 18, 1878	13	1084
Stove.....	W. A. Spicer.....	10, 687	May 21, 1878	13	918
Stove.....	N. S. Vedder and T. S. Heister.....	10, 929-10, 930	Nov. 26, 1878	14	788
Stove.....	N. S. Vedder and T. S. Heister.....	10, 934	Nov. 26, 1878	14	788
Stove.....	N. S. Vedder and T. S. Heister.....	10, 941-10, 942	Dec. 3, 1878	14	824



*Alphabetical list of designs—Continued.*

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				Vol.	Page.
Stove.....	N. S. Vedder, F. Ritchie, and T. S. Heister.	10, 953	Dec. 10, 1878	14	862
Stove.....	N. S. Vedder, F. Ritchie, and T. S. Heister.	10, 957	Dec. 10, 1878	14	862
Stove and range.....	W. Burrows.....	10, 549	Mar. 26, 1878	13	550
Stove, Cook.....	A. Wemyss.....	10, 512	Mar. 5, 1878	13	410
Stove, Cook.....	R. and F. E. Wheeler.....	10, 419	Jan. 29, 1878	13	179
Stove, Cooking.....	J. V. B. Carter.....	10, 965	Dec. 17, 1878	14	904
Stove, Cooking.....	N. S. Vedder and T. S. Heister.....	10, 931-10, 932	Nov. 26, 1878	14	788
Stove, Cooking.....	N. S. Vedder, F. Ritchie, and T. S. Heister.	10, 933	Nov. 26, 1878	14	788
Stove, Cooking.....	N. S. Vedder and T. S. Heister.....	10, 945	Dec. 3, 1878	14	824
Stove, Gas-making.....	C. R. Vaillant.....	10, 824	Sept. 10, 1878	14	380
Stove, Heating.....	C. H. Castle.....	10, 923	Nov. 26, 1878	14	788
Stove, Heating.....	J. S. Van Buren.....	10, 796	Sept. 3, 1878	14	348
Stove, Oil.....	F. A. Magee.....	10, 657	Apr. 30, 1878	13	774
Stove, Parlor.....	F. S. Bissell.....	10, 684	May 21, 1878	13	918
Stove-polish package.....	H. S. Ziegler.....	10, 751	July 9, 1878	14	48
Summer-piece or register-front.....	J. A. Read.....	10, 679-10, 680	May 14, 1878	13	872
T.					
Table-ware handle.....	T. Maddock.....	10, 395	Jan. 8, 1878	13	48
Tobacco-bag.....	W. J. Cussen.....	10, 725-10, 726	June 18, 1878	13	1084
Tobacco, Plug.....	P. B. Gravely and R. W. Lawson.....	10, 787	Aug. 27, 1878	14	310
Toilet-cover, counterpane, &c.....	J. Crossley.....	10, 786	Aug. 20, 1878	14	272
Towel.....	C. J. Webb.....	10, 495-10, 496	Feb. 19, 1878	13	326
Towels, Woven borders for.....	R. T. Webb.....	10, 961	Dec. 10, 1878	14	862
Towels, Woven border for.....	R. T. Webb.....	10, 963	Dec. 10, 1878	14	862
Toy money-bank.....	A. Seligsberg.....	10, 907	Nov. 12, 1878	14	716
Toy money-box.....	E. Stevens.....	10, 509	Mar. 5, 1878	13	410
Toy money-box.....	A. E. Taylor.....	10, 851	Oct. 1, 1878	14	488
Treadles, Foot-piece for.....	G. S. Darling.....	10, 412	Jan. 22, 1878	13	126
Trimming, Fur.....	G. F. Wilhelm.....	10, 531	Mar. 12, 1878	13	458
Type, Font of ornamental printing.....	D. W. Bruce.....	10, 777	Aug. 13, 1878	14	236
Type, Font of ornamental printing.....	J. Herriet.....	10, 767-10, 769	Aug. 6, 1878	14	206
Type, Font of ornamental printing.....	J. Herriet.....	10, 971	Dec. 17, 1878	14	904
Type, Font of printing.....	J. M. Conner.....	10, 450	Feb. 19, 1878	13	326
Type, Font of printing.....	J. M. Conner.....	10, 665	May 7, 1878	13	820
Type, Font of printing.....	J. M. Conner.....	10, 681	May 14, 1878	13	872
Type, Font of printing.....	J. M. Conner.....	10, 685	May 21, 1878	13	918
Type, Font of printing.....	J. M. Conner.....	10, 868	Oct. 15, 1878	14	562
Type, Font of printing.....	H. Ehlert.....	10, 745	July 9, 1878	14	48
Type, Font of printing.....	G. Giesecke.....	10, 622	Apr. 9, 1878	13	658
Type, Font of printing.....	P. Grey.....	10, 898	Nov. 12, 1878	14	716
Type, Font of printing.....	H. Ihlenburg.....	10, 408	Jan. 22, 1878	13	126
Type, Font of printing.....	H. Ihlenburg.....	10, 417	Jan. 29, 1878	13	179
Type, Font of printing.....	H. Ihlenburg.....	10, 446-10, 447	Feb. 12, 1878	13	278
Type, Font of printing.....	H. Ihlenburg.....	10, 517-10, 518	Mar. 12, 1878	13	458
Type, Font of printing.....	H. Ihlenburg.....	10, 667-10, 668	May 7, 1878	13	820
Type, Font of printing.....	H. Ihlenburg.....	10, 712	June 4, 1878	13	1022
Type, Font of printing.....	H. Ihlenburg.....	10, 915	Nov. 19, 1878	14	750
Type, Font of printing.....	W. W. Jackson.....	10, 069	May 7, 1878	13	820
Type, Font of printing.....	W. W. Jackson.....	10, 733	June 25, 1878	13	1130
Type, Font of printing.....	A. Little.....	10, 623	Apr. 9, 1878	13	638
Type, Font of printing.....	A. Little.....	10, 862	Oct. 8, 1878	14	526
Type, Font of printing.....	T. MacKellar.....	10, 955	Dec. 10, 1878	14	862
Type, Font of printing.....	W. Murray.....	10, 899	Nov. 12, 1878	14	716
Type, Font of printing.....	C. Reuter.....	10, 827	Sept. 10, 1878	14	380
Type, Font of printing.....	J. K. Rogers.....	10, 752	July 9, 1878	14	48
Type, Font of printing.....	E. C. Ruthven.....	10, 489	Feb. 19, 1878	13	326
Type, Font of printing.....	R. Smith.....	10, 673	May 7, 1878	13	820
U.					
Umbrella-handle.....	F. J. Kaldenberg.....	10, 616	Apr. 2, 1878	13	598
Umbrella-handle.....	A. Lyon.....	10, 783	Aug. 20, 1878	14	272
V.					
Vase.....	W. Tweedale.....	10, 618	Apr. 2, 1878	13	598
Valves, &c., Hand-wheel for globe and angle.....	J. L. Wolcott.....	10, 775	Aug. 6, 1878	14	206
Valves, Pattern for hand-wheels for.....	C. E. Pease.....	10, 906	Nov. 12, 1878	14	716
Vest.....	A. Bardoe.....	10, 825	Sept. 10, 1878	14	380
W.					
Wall-pocket.....	L. M. B. Gray.....	10, 597	Mar. 5, 1878	13	410
Wall-pocket.....	L. A. Leeser.....	10, 718	June 11, 1878	13	1048
Wall-pocket.....	F. E. Porter.....	10, 624	Apr. 9, 1878	13	658
Watch case or locket.....	A. Robert.....	10, 411	Jan. 22, 1878	13	126
Watch-chain bar.....	F. S. Draper.....	10, 865	Oct. 8, 1878	14	526
Watch-chain charm.....	C. S. Pine.....	10, 967	Dec. 17, 1878	14	904
Woven fabric.....	R. T. Webb.....	10, 962	Dec. 10, 1878	14	862
Woven fabric.....	R. T. Webb.....	10, 964	Dec. 10, 1878	14	862



## ALPHABETICAL LIST OF REISSUES.

Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
A.							
Advertising apparatus .....	N. T. Scott .....	8,355	July 30, 1878	1364	392	14	197
Aging whisky and other spirits, Apparatus for .....	J. Pfeiffer and S. Richards .....	8,042	Jan. 15, 1878	656	192	13	118
Amalgamator .....	J. W. Bancroft and T. Walker .....	8,175	Apr. 16, 1878	830	240	13	720
Animal-cages, Fountain-cup for .....	O. Lindemann .....	8,219	May 7, 1878	310	89	13	863
Armpit-shield .....	W. E. Beames .....	8,331	July 16, 1878	776	222	14	115
Awning or tent cloth, Striped .....	C. E. Wheeler .....	8,431	Sept. 24, 1878	961	281	14	483
Axle box, Car .....	J. Stephenson .....	8,084	Feb. 19, 1878	724	213	13	360
Axle box, Car .....	J. Stephenson .....	8,085	Feb. 19, 1878	725	213	13	360
Axle box, Car .....	J. Stephenson .....	8,086	Feb. 19, 1878	726	213	13	360
Axle box, Car .....	J. Stephenson .....	8,087	Feb. 19, 1878	728	213	13	361
B.							
Back-band hook .....	J. B. Gathright .....	8,227	May 14, 1878	619	173	13	909
Bail-car for pails .....	J. Walton .....	8,462	Oct. 22, 1878	947	276	14	682
Bale-tie .....	J. J. Hagins .....	8,094	Feb. 19, 1878	735	215	13	363
Bale-tie .....	C. H. Victory .....	8,314	July 2, 1878	276	81	14	43
Bale tie, Cotton .....	G. A. Seaver .....	8,482	Nov. 12, 1878	450	137	14	745
Baling-press .....	P. K. Dederick .....	8,296	June 25, 1878	1110	329	13	1171
Baling-press .....	P. K. Dederick .....	8,311	July 2, 1878	272	80	14	43
Baling-press .....	P. K. Dederick .....	8,312	July 2, 1878	273	81	14	43
Barber's chair .....	A. Abel .....	8,320	July 9, 1878	531	151	14	50
Barrel-hoop .....	L. Reed .....	8,501	Nov. 19, 1878	717	214	14	784
Barrel-making machine .....	S. P. Hodgen and J. W. Yelton .....	8,498	Nov. 19, 1878	713	213	14	784
Barrel-pitching machine .....	H. Lehmann .....	8,168	Apr. 9, 1878	504	147	13	674
Basement, basement extension, sidewalk, roof, &c., Illuminated .....	T. Hyatt .....	8,363	Aug. 6, 1878	207	66, 67	14	232
Basin, Catch .....	H. Frank .....	8,226	May 14, 1878	618	172	13	909
Basket .....	B. G. Meinkheim and W. D. Chase .....	8,148	Apr. 2, 1878	231	67	13	635
Bedstead, Cabinet .....	S. C. Maine .....	8,270	June 4, 1878	223	71	13	1044
Bedstead, Table .....	E. Kiss .....	8,375	Aug. 13, 1878	469	141	14	263
Bedstead, Wardrobe .....	S. C. Maine .....	8,269	June 4, 1878	222	71	13	1044
Bedstead, Wardrobe .....	A. Stark .....	8,161	Apr. 9, 1878	495	145	13	671
Beer-cooler .....	A. Roos .....	8,420	Sept. 17, 1878	695	204	14	416
Billiard-cushion .....	H. W. Collander .....	8,133	Mar. 19, 1878	814	248	13	566
Billiard-table cushion .....	J. E. Boyle .....	8,172	Apr. 16, 1878	825	239	13	719
Billiard-table cushion .....	H. W. Collander .....	8,132	Mar. 19, 1878	813	248	13	566
Binder, Temporary .....	W. A. Amberg .....	8,209	May 7, 1878	301	86	13	862
Binder, Temporary .....	B. Brower and J. F. Adams .....	8,277	June 11, 1878	486	140, 141	13	1070
Binder, Temporary .....	S. Otis .....	8,419	Sept. 17, 1878	694	204	14	416
Binder, Temporary .....	E. H. Thompson .....	8,072	Feb. 5, 1878	233	71	13	209
Bird-cage .....	A. E. Mook .....	8,486	Nov. 12, 1878	453	138	14	745
Bit-brace .....	N. Spofford .....	8,215	May 7, 1878	307	88	13	862
Bit-stock .....	H. S. Bartholomew .....	8,115	Mar. 12, 1878	517	158	13	497
Bit-stock .....	H. L. Pratt .....	8,525	Dec. 17, 1878	799	219	14	923
Blasting-squib .....	S. H. Waddow .....	8,364	Aug. 6, 1878	210	67	14	233
Blood, Making composition articles from .....	W. H. Dibble .....	8,305	June 25, 1878	1121	333	13	1173
Book-binding .....	J. S. Lever .....	8,195	Apr. 23, 1878	1161	333	13	709
Book-binding .....	I. Reynolds .....	8,039	Jan. 15, 1878	653	191	13	117
Book-binding .....	I. Reynolds .....	8,056	Jan. 22, 1878	948	275	13	171
Boot and shoe edge burnishing machine .....	C. J. Addy .....	8,246	May 21, 1878	968	277	13	963
Boot and shoe heel stiffener .....	G. V. Sheffield .....	8,477	Nov. 5, 1878	230	69	14	711
Boot and shoe lasting machine .....	G. W. Copeland, E. Woodward, and M. Brock .....	8,138	Mar. 26, 1878	1090	333	13	323
Boot and shoe seam .....	C. F. Langford .....	8,228	May 14, 1878	620	173	13	909
Boot and shoe soles, Machine for beating out and molding .....	S. Ross .....	8,421	Sept. 17, 1878	696	204	14	416
Boot and shoe stiffeners, Manufacture of .....	W. N. Sprague .....	8,184	Apr. 16, 1878	840	242	13	721
Boot, Balmoral or laced .....	L. R. Stockbridge .....	8,128	Mar. 19, 1878	809	246	13	365
Boots and shoes, Manufacture of .....	L. E. de Waru .....	8,162	Apr. 16, 1878	838	242	13	721
Boring machine, Wood .....	J. D. Shoots .....	8,155	Apr. 2, 1878	238	69	13	633
Bottle and bottle-stopper .....	H. Codd .....	8,372	Aug. 13, 1878	464	140	14	267
Bottle-stopper .....	E. Harris .....	8,382	Aug. 20, 1878	720	215	14	304
Bottle-stopper .....	J. Klee .....	8,034	Jan. 8, 1878	438	128	13	84
Bottle-stopper .....	F. W. Perry .....	8,061	Jan. 29, 1878	1223	359	13	222
Bottle-stopper fastener .....	A. Luthy .....	8,234	May 14, 1878	627	174	13	910
Boxes, Manufacturing .....	J. Sperry .....	8,480	Nov. 5, 1878	234	70	14	712
Boxes, Manufacturing .....	J. Sperry .....	8,481	Nov. 5, 1878	234	70	14	712
Bracket .....	E. H. Bates .....	8,464	Oct. 22, 1878	950	277	14	633
Brake-shoe .....	W. McConway .....	8,255	May 28, 1878	1287	367	13	1066
Breweries, Washing shavings in .....	F. Hinkel .....	8,099	Feb. 26, 1878	963	284	13	404
Brick-machine .....	P. H. Kells .....	8,127	Mar. 19, 1878	807	246	13	365
Brick-machine .....	Z. Phillips .....	8,284	June 11, 1878	493	143	13	1060
Bridge, Truss .....	J. M. McDonald .....	8,280	June 11, 1878	490	142	13	1060
Bridle-bit .....	J. A. Fairbanks .....	8,278	June 11, 1878	488	141	13	1059
Brush, Horse .....	H. Giesecke .....	8,272	June 4, 1878	225	72	13	1064
Burg-wrench .....	J. Lacey and G. B. Cornell .....	8,468	Oct. 29, 1878	1196	347	14	671
Burner, Vapor .....	W. H. Smith .....	8,437	Sept. 24, 1878	968	283	14	494
Burning-kiln furnace .....	G. C. Surls .....	8,230	May 14, 1878	622	173	13	910
Butter, Artificial .....	W. E. Andrew .....	8,048	Jan. 22, 1878	937	283	13	170

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
C.							
Calculator, Perpetual time and interest.....	J. Kachelman, jr. ....	8, 334	July 16, 1878	778	223	14	115
Calendar.....	C. W. Bryan.....	8, 492	Nov. 19, 1878	705	210	14	783
Cane-juice, Process and apparatus for evaporating and defeating.....	D. M. Cook.....	8, 341	July 23, 1878	1059	304	14	154
Canister.....	G. Lillibridge.....	8, 500	Nov. 19, 1878	717	214	14	784
Canister.....	E. Noxon.....	8, 249	May 21, 1878	973	277	13	962
Capstan.....	J. T. Henthorn and B. D. Thayer.....	8, 511	Dec. 3, 1878	224	59	14	853
Capsules, Machine for cutting off gelatine.....	F. A. Hubel.....	8, 440	Oct. 1, 1878	218	62, 63	14	515
Car, Brick-carrying.....	J. K. Caldwell.....	8, 027	Jan. 8, 1878	431	126	13	82
Car-bumper.....	S. M. Cummings.....	8, 448	Oct. 15, 1878	715	207	14	596
Car-coupling.....	W. Dunn.....	8, 467	Oct. 29, 1878	1194	347	14	670
Car-coupling.....	C. Gifford.....	8, 392	Sept. 3, 1878	212	65	14	375
Car-coupling.....	E. H. Janney.....	8, 153	Apr. 2, 1878	235	68, 69	13	633
Car-coupling.....	E. M. Van Hoesen and N. H. Brown.....	8, 412	Sept. 10, 1878	465	140	14	412
Car, Dumping.....	D. O'Brien.....	8, 021	Jan. 1, 1878	211	59	13	40
Car-roof.....	J. L. Burnham.....	8, 383	Aug. 20, 1878	720	215	14	304
Cars, Draft and buffing apparatus for railway.....	E. L. Caum.....	8, 095	Feb. 19, 1878	736	216	13	362
Cars, Draft apparatus for railway.....	S. Griffith and J. S. Patterson.....	8, 081	Feb. 12, 1878	499	147	13	318
Carding-machine screen.....	W. J. English.....	8, 313	July 2, 1878	275	81	14	43
Carding machine, Wool.....	P. L. Klein.....	8, 156	Apr. 2, 1878	239	70	13	633
Carpet pad, Stair.....	G. W. Chipman.....	8, 116	Mar. 12, 1878	518	158	13	497
Carpet-sweeper.....	H. A. Gore and G. W. Edgecomb.....	8, 397	Sept. 3, 1878	217	60, 67	14	376
Carriage and chair combined.....	C. F. Tenney and T. J. Hobbs.....	8, 166	Apr. 9, 1878	502	146	13	674
Carriage, Child's.....	F. L. Hughes.....	8, 417	Sept. 17, 1878	692	203	14	416
Carriage-spring.....	H. Sprague.....	8, 461	Oct. 22, 1878	946	276	14	632
Carriage-top.....	I. Cogswell, jr.....	8, 151	Apr. 2, 1878	233	68	13	632
Carriages, Canopy-top for.....	C. E. Vosburgh.....	8, 074	Feb. 5, 1878	236	72	13	269
Carriages, Reversible handle for children's.....	F. W. Whitney.....	8, 327	July 9, 1878	538	153	14	81
Cartridge-box.....	J. W. Frazier.....	8, 112	Mar. 5, 1878	261	82	13	454
Cartridge, Signal.....	E. W. Very.....	8, 167	Apr. 9, 1878	503	146	13	674
Caster.....	T. L. Rivers.....	8, 154	Apr. 2, 1878	237	69	13	633
Caster frame, Trunk.....	G. B. Jenkinson.....	8, 180	Apr. 16, 1878	837	241	13	721
Caster, Trunk.....	M. Scherwin.....	8, 171	Apr. 9, 1878	506	147	13	674
Casting, Process and apparatus for compressing ingots while.....	W. R. Jones.....	8, 427	Sept. 24, 1878	956	280	14	482
Castings, Rumbler for cleaning.....	L. I. Todd.....	8, 310	July 2, 1878	270	80	14	42
Cellar, Water-proof.....	T. New.....	8, 387	Aug. 20, 1878	727	217	14	306
Cement, Composition for making hydraulic.....	C. F. Dunderdale.....	8, 237	May 21, 1878	958	.....	13	960
Centrifugal machine, Self-balancing.....	D. M. Weston.....	8, 488	Nov. 12, 1878	457	138	14	746
Centrifugal machine, Self-balancing.....	D. M. Weston.....	8, 489	Nov. 12, 1878	459	138	14	746
Chain-machine.....	L. Fitzpatrick and J. Schineller.....	8, 485	Nov. 12, 1878	452	137	14	745
Chair-bottom.....	H. S. Hale.....	8, 041	Jan. 15, 1878	625	192	13	118
Chairs, &c., Design for coverings for.....	J. H. Travis.....	8, 519	Dec. 10, 1878	484	.....	14	896
Chandeller, Extension.....	H. Tucker.....	8, 371	Aug. 13, 1878	462	140	14	269
Check-book, Pocket.....	G. E. Waring, jr.....	8, 199	Apr. 23, 1878	1166	335	13	770
Churn.....	J. Campbell.....	8, 293	June 18, 1878	801	237	13	1126
Cider-mill.....	J. Bowen.....	8, 441	Oct. 1, 1878	220	63	14	518
Clock-cases, Design for.....	H. J. Davies.....	8, 504	Nov. 26, 1878	958	.....	14	819
Clock, Pendulum.....	V. Himmer.....	8, 194	Apr. 23, 1878	1160	333	13	769
Clothes-pounder.....	F. A. Sumner.....	8, 496	Nov. 19, 1878	709	212	14	783
Coal-scuttle.....	G. Smith.....	8, 428	Sept. 24, 1878	958	280	14	482
Cock, Stop.....	G. C. Bailey.....	8, 024	Jan. 8, 1878	427	125	13	82
Coffee and peanut roaster.....	C. L. Hall.....	8, 479	Nov. 5, 1878	232	69	14	712
Coin, Apparatus for holding and delivering.....	J. W. Meaker.....	8, 274	June 4, 1878	227	72	13	1044
Coin, Apparatus for holding and delivering.....	J. W. Meaker.....	8, 275	June 4, 1878	229	72	13	1044
Collar.....	J. K. P. Pine.....	8, 369	Aug. 13, 1878	459	139	14	266
Collar.....	W. Wilson.....	8, 169	Apr. 9, 1878	505	147	13	674
Collar, Horse.....	A. Beckwith.....	8, 358	Aug. 6, 1878	201	65	14	231
Collars, Die for making.....	G. K. Snow.....	8, 046	Jan. 22, 1878	934	272	13	169
Colter.....	S. T. Ferguson.....	8, 038	Jan. 15, 1878	652	191	13	117
Condenser, Engine.....	W. J. Allen.....	8, 188	Apr. 23, 1878	1153	331	13	768
Condenser, Steam-engine.....	J. Absterdam.....	8, 193	Apr. 23, 1878	1158	333	13	769
Cop-tubes, Machine for making.....	R. Douglas.....	8, 328	July 9, 1878	540	154	14	81
Corset.....	D. H. Fanning.....	8, 493	Nov. 19, 1878	706	210	14	783
Corset.....	F. W. Perrott.....	8, 361	Aug. 6, 1878	204	65	14	232
Corset.....	L. D. Warner.....	8, 114	Mar. 5, 1878	263	82	13	454
Corsets, Manufacture of.....	A. Feltheimer.....	8, 244	May 21, 1878	966	276	13	961
Cultivator.....	J. C. Boyd.....	8, 406	Sept. 10, 1878	459	138	14	410
Cultivator, Harrow.....	E. Crane.....	8, 260	May 28, 1878	1293	368	13	1007
Cultivator, Harrow.....	E. Crane.....	8, 261	May 28, 1878	1295	368	13	1007
Cultivator, Harrow.....	C. La Dow.....	8, 159	Apr. 9, 1878	491	144	13	672
Cultivator, Rotary.....	M. Johnson.....	8, 222	May 7, 1878	314	90	13	864
Curtain-roller and bracket.....	P. W. Phillips.....	8, 404	Sept. 10, 1878	457	137	14	410
Cuttle-fish holder.....	A. H. Alverson.....	8, 503	Nov. 26, 1878	958	278	14	819
D.							
Dental drill.....	A. Hartman.....	8, 231	May 14, 1878	623	174	13	910
Dental drill.....	C. Poor.....	8, 065	Jan. 29, 1878	1228	360, 361	13	223
Dental drill.....	W. M. Reynolds.....	8, 409	Sept. 10, 1878	461	139	14	411
Dental operating-chair.....	J. O. Whitcomb.....	8, 389	Aug. 27, 1878	1005	293, 294	14	344
Dentist's chair.....	O. C. White and A. T. Ashmead.....	8, 380	Aug. 20, 1878	717	214	14	303
Desks, Folding seat for school.....	U. Smith.....	8, 446	Oct. 8, 1878	464	134	14	548
Diamonds, Mounting glaziers.....	P. Simz.....	8, 478	Nov. 5, 1878	231	69	14	712
Dish, Butter.....	G. E. Savage.....	8, 179	Apr. 16, 1878	836	241	13	721
Drawer-lock.....	R. W. Whitney.....	8, 079	Feb. 12, 1878	497	146	13	317
Drum, Heating.....	L. T. Houghton.....	8, 329	July 9, 1878	541	154	14	82

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E.							
Effervescent liquids, Apparatus for	T. Warker	8, 200	Apr. 23, 1878	1167	335	13	770
Eggs, Case for transporting	J. L. and G. W. Stevens	8, 091	Feb. 19, 1878	733	215	13	362
Electric machine, Dynamo	E. Weston	8, 102	Feb. 20, 1878	966	284	13	405
Electric machine, Dynamo	E. Weston	8, 141	Mar. 26, 1878	1104	331	13	522
Envelope, Letter-sheet	C. Foster	8, 206	Apr. 30, 1878	1491	436	13	816
Eyelet for securing buckles to straps	C. W. White	8, 484	Nov. 12, 1878	451	137	14	745
F.							
Fan	O. Brueck	8, 207	Apr. 30, 1878	1491	436	13	816
Fat, Treating animal	H. Mégo	8, 424	Sept. 24, 1878	954		14	482
Faucet-holes, Bushing for	S. R. Thompson	8, 483	Nov. 12, 1878	451	137	14	745
Feed-water heater	P. C. Wortman	8, 216	May 7, 1878	308	88	13	863
Fence	L. P. Judson	8, 096	Feb. 19, 1878	737	216	13	362
Fence, Portable	H. M. Dake	8, 152	Apr. 2, 1878	234	68	13	632
Fence, Wire	C. D. Johnson and L. F. Johnston	8, 078	Feb. 12, 1878	497	146	13	817
Fertilizer	G. J. Popplein	8, 187	Apr. 16, 1878	843		13	721
Filter	R. S. Jennings	8, 188	Apr. 16, 1878	839	242	13	721
Filtering apparatus	A. Van Hagen	8, 192	Apr. 23, 1878	1157	332	13	769
Fire-alarm, Electric and thermostatic	C. S. Shute	8, 075	Feb. 5, 1878	236	72	13	269
Fire-alarm signal-box	R. N. Tooker	8, 267	May 28, 1878	1301	370	13	1008
Fire-arm, Breech-loading	W. H. Baker	8, 053	Jan. 22, 1878	944	274	13	171
Fire-arm, Magazine	A. Ball	8, 110	Feb. 26, 1878	981	289	13	406
Fire-arm, Revolving	G. W. Schofield	8, 354	July 30, 1878	1363	891	14	196
Fire-engine, Knapsack	J. W. Douglas	8, 177	Apr. 10, 1878	834	240	13	720
Fire-extinguisher	H. S. Parmelee	8, 376	Aug. 13, 1878	470	142	14	268
Fluting-machine	S. G. Cabell	8, 453	Oct. 15, 1878	721	209	14	597
Fluting-machine	H. Luchs	8, 338	July 16, 1878	786	224	14	116
Fluting-machine	T. Robjohn	8, 174	Apr. 16, 1878	827	239	13	719
Fluting-machine	C. A. Sterling	8, 403	Sept. 10, 1878	456	137		
Folding chair	H. S. Golightly and C. T. Twitchell.	8, 470	Oct. 29, 1878	1198	34	14	671
Folding rocking-chair	E. F. Russell	8, 471	Oct. 29, 1878	1198	348	14	671
Friction-clutch	C. E. Burwell and F. G. Bates	8, 518	Dec. 10, 1878	482	136	14	896
Fruit-drying oven	D. Lippy and S. Linn	8, 398	Sept. 3, 1878	218	67	14	876
Furnaces, Feeding air to	J. Jenks	8, 203	Apr. 30, 1878	1487	435	13	816
G.							
Garter	C. Coester, jr., and J. L. Moore	8, 146	Mar. 26, 1878	1118	336	13	594
Gas apparatus	J. Hanlon	8, 402	Sept. 3, 1878	223	69	14	376
Gas-lighter	J. R. Scattergood	8, 173	Apr. 10, 1878	827	239	13	719
Gas-motor engine	N. A. Otto and F. W. and W. J. Crossley.	8, 107	Feb. 20, 1878	974	286	13	406
Gas-retorts, Cooling apparatus for stand-pipes of	D. R. Shiras	8, 436	Sept. 24, 1878	967	282		
Gas-retorts, Preventing loss of heat in charging	J. Slado	8, 422	Sept. 17, 1878	698	205	14	418
Gate	J. S. Jewett	8, 232	May 14, 1878	625	174	13	910
Gate	J. Mason and J. F. Wilson	8, 456	Oct. 15, 1878	725	210	14	597
Gate	A. G. Rockfellow	8, 515	Dec. 10, 1878	478	135	14	835
Gate	K. E. Rudd	8, 149	Apr. 2, 1878	231	67	13	632
Gate	J. S. Winsor	8, 325	July 9, 1878	536	153	14	81
Glass, Hardening, tempering, and pressing	F. Siemens	8, 399	Sept. 8, 1878	219	67	14	376
Glass, Hardening, tempering, and pressing	F. Siemens	8, 400	Sept. 8, 1878	220	68, 69	14	376
Glass, Ornamented window	R. M. Tudor	8, 514	Dec. 3, 1878	228	61	14	854
Glass vessel, Incased	D. W. Norris	8, 324	July 9, 1878	534	152	14	89
Glove-fastening	F. G. Farnham	8, 445	Oct. 8, 1878	462	133	14	548
Grain-binder	N. B. Fassett	8, 136	Mar. 26, 1878	1092	332	13	591
Grain-binder	A. Goodyear, 2d.	8, 318	July 2, 1878	280	82, 83	14	44
Grain-binder	A. J. Smith	8, 143	Mar. 26, 1878	1107	335	13	592
Grain-binder	G. Warner	8, 513	Dec. 3, 1878	226	60, 61	14	854
Grain-scourer	C. B. Horton	8, 352	July 30, 1878	1361	391	14	198
Grain ventilating and cooling apparatus	D. E. Somes	8, 221	May 7, 1878	312	90	13	864
Graining-machine	G. Pelstring	8, 507	Nov. 20, 1878	961	276	14	819
Grinding-machine	L. Bollman	8, 497	Nov. 19, 1878	710	212	14	733
Grinding-machine	G. Cowing	8, 030	Jan. 8, 1878	434	127		
Grinding-mill	B. Whitney	8, 097	Feb. 19, 1878	738	216	13	362
Grinding-mill	B. Whitney	8, 098	Feb. 19, 1878	739	216	13	362
Gun-magazine	A. Burgess	8, 288	June 18, 1878	793	235	13	1124
H.							
Harness-pad	M. V. Longworth	8, 418	Sept. 17, 1878	693	204	14	416
Harrow	F. Bramer	8, 209	June 25, 1878	1114	330	13	1171
Harrow	D. L. Garver	8, 142	Mar. 20, 1878	1106	334	13	592
Harrow, Wheel	E. Bayliss	8, 147	Apr. 2, 1878	228	66, 67	13	633
Harrow, Wheel	F. Bramer and O. W. Badger	8, 080	Feb. 12, 1878	498	146	13	317
Harvester	C. Colahan	8, 290	June 18, 1878	797	236	13	1125
Harvester	J. F. Seiberling	8, 144	Mar. 26, 1878	1109	335	13	593
Harvester-rake	J. Miller	8, 119	Mar. 12, 1878	520	159	13	498
Hay and cotton press	P. K. Dederick	8, 130	Mar. 19, 1878	811	247	13	546
Hay and cotton press	P. K. Dederick	8, 292	June 18, 1878	800	237	13	1126
Hay and cotton press	P. K. Dederick	8, 316	July 2, 1878	278	82	14	43
Hay and cotton press	P. K. Dederick	8, 317	July 2, 1878	279	82	14	44
Hay-rake, Horse	C. B. Holden	8, 475	Nov. 5, 1878	228	68	14	711
Hay-rake, Horse	C. La Dow	8, 157	Apr. 2, 1878	240	70	13	633
Hay-rake, Horse	J. H. Melick	8, 279	June 11, 1878	489	147	13	1069
Head-light, Locomotive	A. Dressell, and E. H. and J. G. Voth.	8, 447	Oct. 8, 1878	465	134	14	548
Heel and sole trimming machine	J. H. Busell	8, 239	May 21, 1878	960	274	13	961
High chair for children	J. Nichols	8, 454	Oct. 15, 1878	723	209	14	597

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Hoop-skirt .....	F. A. Brewster .....	8,040	Jan. 15, 1878	654	191	13	118
Horse-power .....	C. E. Macarthy .....	8,366	Aug. 13, 1878	454	139	14	266
Horse-power .....	O. O. Storle .....	8,476	Nov. 5, 1878	230	69	14	712
Horseshoe-blank bar .....	W. M. Greenwood and J. N. Clarke .....	8,506	Nov. 26, 1878	960	278	14	819
Horseshoe-blanks, Roll for rolling .....	W. M. Greenwood and J. N. Clarke .....	8,505	Nov. 26, 1878	959	278	14	819
Horseshoe-nails, Machine for making .....	D. B. Loring .....	8,302	June 25, 1878	1117	330	13	1172
Horseshoes, Machine for making .....	H. J. Batchelder .....	8,340	July 16, 1878	787	225	14	116
Hot-air furnace .....	J. W. Crary .....	8,416	Sept. 17, 1878	691	203	14	416
Hub for carriage-wheels .....	J. Raddin .....	8,108	Feb. 26, 1878	978	288	13	406
Hubs, Machine for boring wagon .....	J. Kritch .....	8,442	Oct. 1, 1878	221	63	14	518
I.							
Ice, Method of and apparatus for manufacturing .....	A. Albertson .....	8,455	Oct. 15, 1878	724	209	14	597
Indicator-lock .....	T. Lalor .....	8,212	May 7, 1878	303	87	13	862
Indicator-lock register .....	T. Lalor .....	8,213	May 7, 1878	305	87	13	862
Injector .....	G. H. Little .....	8,104	Feb. 26, 1878	970	285	13	405
Injector .....	G. H. Little .....	8,105	Feb. 26, 1878	972	285	13	405
Inkstand .....	W. A. Hull .....	8,439	Oct. 1, 1878	218	62	14	518
Insects by fumigation, Device for destroying .....	T. F. Bingham .....	8,326	July 9, 1878	537	153	14	81
J.							
Jewelry-base, Design for .....	F. Keller and C. Frey .....	8,413	Sept. 10, 1878	466	140	14	412
Jewelry, Ornamental scroll-work for (design) .....	L. Heckmann .....	8,300	June 25, 1878	1116	.....	13	1172
K.							
Knit fabric for stockings, &c .....	C. E. Wakeman .....	8,353	July 30, 1878	1362	391	14	196
Knitting-machine burr .....	W. H. Carr .....	8,391	Sept. 3, 1878	211	65	14	375
Knob, Silvered-glass door .....	J. W. Haines .....	8,139	Mar. 26, 1878	1103	334	13	592
L.							
Lamp .....	B. B. Schneider .....	8,066	Jan. 29, 1878	1231	361	13	223
Lamp .....	B. B. Schneider .....	8,067	Jan. 29, 1878	1231	361	13	224
Lamp .....	B. B. Schneider .....	8,250	May 21, 1878	974	278	13	962
Lamp-extinguisher .....	W. C. Ebert .....	8,309	July 2, 1878	268	80	14	43
Lamp-shade holder .....	E. P. Gleason .....	8,345	July 23, 1878	1063	305	14	155
Lantern .....	E. F. Cash and A. L. Baron .....	8,502	Nov. 19, 1878	718	214	14	784
Lantern, Signal .....	H. E. Pond .....	8,457	Oct. 15, 1878	726	210	14	598
Lasting-machine .....	H. G. Thompson .....	8,487	Nov. 12, 1878	454	138	14	745
Leather boarding and graining machine .....	L. Townsend .....	8,088	Feb. 19, 1878	729	214	13	361
Leather, &c., soft and flexible, and impervious to gas and composition for same, Rendering .....	E. Osgood .....	8,186	Apr. 16, 1878	843	.....	13	722
Lighting device, Pocket .....	P. B. Tyler, W. M. Chandler, and L. F. Standish .....	8,490	Nov. 12, 1878	460	139	14	746
Lightning-rod .....	H. W. Farley .....	8,459	Oct. 22, 1878	944	275	14	631
Lightning-rod .....	L. D. Vermilya, W. S. Reyburn, and E. A. W. Hunter .....	8,429	Sept. 24, 1878	959	281	14	483
Lightning-rod coupling .....	W. S. Reyburn and E. A. W. Hunter .....	8,304	June 25, 1878	1120	331	13	1172
Liquid-transporting can .....	J. Graves .....	8,113	Mar. 5, 1878	262	82	13	454
Liquid, Apparatus for evaporating .....	J. J. Johnston .....	8,373	Aug. 13, 1878	467	{ 140 141 }	14	267
Liquids, Evaporating .....	J. J. Johnston .....	8,374	Aug. 13, 1878	468	141	14	267
Lock .....	W. H. Taylor .....	8,379	Aug. 20, 1878	715	214	14	303
Lock .....	L. Yale, jr. .....	8,158	Apr. 2, 1878	242	70, 71	13	633
Locomotive-spring .....	J. Jenkins .....	8,057	Jan. 29, 1878	1220	358	13	221
Loom-picker .....	J. E. Parker .....	8,191	Apr. 23, 1878	1156	332	13	709
Loom take-up .....	G. H. Holmes .....	8,298	June 25, 1878	1113	329	13	1171
Lubricating composition for journal-bearings .....	J. Johnson .....	8,140	Mar. 26, 1878	1103	.....	13	592
Lumber, Drying .....	G. Woods .....	8,129	Mar. 19, 1878	810	247	13	546
Lumber-drying apparatus .....	R. P. Johnson .....	8,240	May 21, 1878	962	275	13	961
M.							
Machine-needles, Machine for polishing the eyes of .....	J. Berry .....	8,349	July 23, 1878	1067	306	14	156
Machine-needles, Polishing the eyes of .....	J. Berry .....	8,350	July 23, 1878	1068	306	14	156
Manure-spreader .....	J. S. Kemp .....	8,254	May 28, 1878	1286	366	13	1008
Mashing grain .....	J. D'Heureuse .....	8,224	May 14, 1878	616	172	13	909
Mashing, Process and apparatus for .....	G. Ellenberger .....	8,050	Jan. 22, 1878	939	273	13	170
Meat-tenderer .....	C. T. Stephens .....	8,233	May 14, 1878	626	174	13	910
Meats, Preserving .....	D. C. Link .....	8,090	Feb. 19, 1878	732	214	13	361
Metal plates to structures, Securing .....	W. G. Hyndman .....	8,100	Feb. 26, 1878	964	284	13	404
Metals, Preparing and coating .....	J. J. McCullough .....	8,220	May 7, 1878	311	89	13	803
Metallic can .....	C. Green and W. Wilson, jr. ....	8,126	Mar. 19, 1878	806	245	13	545
Middlings-purifier .....	A. R. Guildler .....	8,386	Aug. 20, 1878	725	216	14	305
Middlings-separator .....	J. Barker .....	8,528	Dec. 17, 1878	803	220	14	942
Millstone-dressing machine .....	W. Coplin .....	8,377	Aug. 13, 1878	471	142	14	263
Molding, Picture-rod .....	L. J. Baker .....	8,208	Apr. 30, 1878	1492	437	13	816
Mower, Lawn .....	J. Shaw .....	8,268	May 28, 1878	1303	371	13	1008
Mucilage-bottle .....	G. R. Wright .....	8,347	July 23, 1878	1066	305	14	155
Musical instrument, Automatic .....	E. P. Needham .....	8,451	Oct. 15, 1878	718	208	14	508
O.							
Oil and paint box and can .....	H. B. Everest and A. P. Ross .....	8,225	May 14, 1878	617	172	13	909
Oils, Vessel for storing and transporting .....	T. J. McGarry .....	8,071	Feb. 5, 1878	232	71	13	269
Ore-roasting furnace .....	C. Stetefeldt .....	8,266	May 28, 1878	1300	370	13	1008
Ore-roasting-furnace, Pulverized .....	C. Stetefeldt .....	8,165	Apr. 9, 1878	501	146	13	674
Ore-washing apparatus for hydraulic mining .....	J. M. Allenwood .....	8,037	Jan. 15, 1878	651	191	13	117

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Organ, Reed .....	H. W. Smith .....	8,516	Dec. 10, 1878	480	135	14	895
Overalls .....	H. T. Woodward .....	8,693	Feb. 10, 1878	734	215	13	362
<b>P.</b>							
Packing deep wells .....	A. H. Fowler and E. J. Morgan .....	8,401	Nov. 12, 1878	461	139	14	746
Packing, Piston-rod .....	E. T. Prindle .....	8,411	Sept. 10, 1878	464	139	14	411
Painting striped awnings in oil-colors, Process and apparatus for.	C. E. Wheeler .....	8,430	Sept. 24, 1878	960	281	14	483
Painting wire-cloth .....	C. H. Waters .....	8,022	Jan. 1, 1878	212	.....	13	40
Paper bag .....	J. Arkell and B. and A. Smith .....	8,202	Apr. 30, 1878	1485	435	13	815
Paper-bag machine .....	C. H. Morgan .....	8,527	Dec. 17, 1878	802	{ 219 220 392 393 }	14	942
Paper-bag machine .....	C. B. Stillwell .....	8,357	July 30, 1878	1366	58, 59	14	197
Paper-box machine .....	H. R. Heyl and A. Brehmer .....	8,020	Jan. 1, 1878	206	58, 59	13	40
Paper-cutting machine .....	E. R. and T. W. Sheridan .....	8,205	Apr. 30, 1878	1489	436	13	816
Paper-damping machine .....	W. Bullock .....	8,145	Mar. 26, 1878	1112	336	13	503
Paper, Machine for sizing and varnishing .....	R. McNamee .....	8,407	Sept. 10, 1878	459	138	14	411
Paper pall .....	A. and I. Jennings .....	8,190	Apr. 23, 1878	1155	332	13	709
Paper-pulp from wood, Manufacture of .....	H. B. Meech .....	8,256	May 28, 1878	1289	367	13	1006
Paper-pulp from wood, Manufacture of .....	H. B. Meech .....	8,257	May 28, 1878	1290	367	13	1006
Paper-pulp from wood, Manufacture of .....	H. B. Meech .....	8,258	May 28, 1878	1290	368	13	1006
Paper-pulp, Stock-grinder for .....	F. A. Cushman .....	8,197	Apr. 23, 1878	1163	334	13	770
Paper-pulp, Wood-grinder for .....	F. A. Cushman .....	8,198	Apr. 23, 1878	1164	334	13	770
Paper tubes, Machine and process for making .....	A. G. Batcher .....	8,196	Apr. 23, 1878	1162	334	13	769
Paper, Waxing .....	S. Hammerschlag .....	8,460	Oct. 22, 1878	945	276	14	631
Pasteboard, Machine for lining and drying .....	G. L. Jaeger .....	8,509	Nov. 26, 1878	962	270	14	820
Pen, Writing .....	L. B. Bertram .....	8,242	May 21, 1878	964	275	13	961
Photographic-plate holder .....	R. F. Chandler and A. Bonzano .....	8,359	Aug. 6, 1878	202	65	14	231
Piano-forte action, Upright .....	A. H. Hastings .....	8,185	Apr. 16, 1878	841	242	13	722
Piano-forte attachment .....	M. W. Hanchett .....	8,319	July 2, 1878	283	84	14	44
Pipe-coupling .....	G. Westinghouse, jr. ....	8,201	June 18, 1878	798	256	13	1125
Pitcher, Ice .....	H. B. Beach .....	8,444	Oct. 8, 1878	462	133	14	557
Planing-machine .....	J. Goodrich and H. J. Colburn .....	8,438	Oct. 1, 1878	216	62	14	518
Planing machine, Wood .....	J. Richards .....	8,297	June 25, 1878	1111	329	13	1171
Planter, Corn .....	J. W. Fawkes .....	8,054	Jan. 22, 1878	945	274	13	171
Planter, Corn .....	D. and D. F. Luse .....	8,245	May 21, 1878	967	276	13	962
Planter, Seed .....	L. J. Corbin .....	8,089	Feb. 19, 1878	730	214	13	361
Plow .....	H. Gale .....	8,082	Feb. 12, 1878	500	147	13	318
Plow, Subsoil .....	I. M. Griffin .....	8,342	July 23, 1878	1061	304	14	154
Pocket-book clasp .....	L. Messer .....	8,106	Feb. 26, 1878	973	285	13	406
Pocket-book fastening .....	L. Messer .....	8,123	Mar. 12, 1878	525	161	13	498
Pocket-book frame .....	D. M. Read and L. Prahor .....	8,408	Sept. 10, 1878	461	139	14	411
Pole, Carriage .....	A. R. Bartram .....	8,253	May 28, 1878	1285	366	13	1006
Preserving and canning green corn, Apparatus and process for.	G. L. Merrell and O. F. Soule .....	8,351	July 23, 1878	1069	.....	14	156
Preserving fruits .....	D. M. Mefford .....	8,229	May 14, 1878	621	173	13	909
Pressure regulator, Steam or water .....	J. E. Watts .....	8,124	Mar. 12, 1878	526	161	13	496
Printer's furniture .....	H. A. Hennepel .....	8,321	July 9, 1878	531	152	14	80
Printer's quoin .....	E. A. Warren .....	8,210	May 7, 1878	302	86	13	862
Printing-machine .....	R. M. Hoe .....	8,346	July 23, 1878	1065	305	14	155
Projectile for ordnance .....	H. Reilly .....	8,308	June 25, 1878	1124	332	13	1172
Pump .....	T. Dowling .....	8,243	May 21, 1878	965	276	13	961
Pump-bucket chain .....	J. S. Wilcox .....	8,370	Aug. 13, 1878	461	140	14	267
Pump-operating machinery .....	J. W. Hill .....	8,262	May 28, 1878	1297	369	13	1007
Pumps, Clack-valve for .....	W. C. D. Body .....	8,332	July 16, 1878	770	222	14	115
Pumping fluids from casks, &c., Apparatus for .....	W. F. Class .....	8,025	Jan. 8, 1878	429	126	13	82
Pumping fluids from casks, &c., Apparatus for .....	W. F. Class .....	8,026	Jan. 8, 1878	430	126	13	82
Punching and beveling metal, Machine for .....	J. Morgan .....	8,251	May 28, 1878	1283	365	13	1005
<b>R.</b>							
Rail-joint .....	G. E. Morris and C. W. Gregory .....	8,050	Jan. 29, 1878	1221	359	13	222
Railway, Elevated .....	D. Fitzgerald .....	8,302	Aug. 6, 1878	205	66	14	232
Railway-signal, Electric .....	F. L. Pope .....	8,044	Jan. 22, 1878	928	{ 271 272 }	13	169
Railway-signal, Electric .....	F. L. Pope .....	8,045	Jan. 22, 1878	932	272	13	169
Railway, Street .....	J. R. Beckett .....	8,125	Mar. 19, 1878	804	245	13	544
Railways, Construction of .....	J. S. Hyde .....	8,465	Oct. 22, 1878	951	277	14	633
Range, Cooking .....	J. Magee .....	8,330	July 9, 1878	541	154	14	82
Razor-stop .....	J. Lamont .....	8,181	Apr. 16, 1878	837	241	13	721
Refrigerating apparatus .....	J. L. Allberger .....	8,169	Feb. 26, 1878	979	268	13	406
Refrigerator .....	G. F. Smith .....	8,463	Oct. 22, 1878	948	{ 276 277 }	14	632
Refrigerator-building .....	T. Krausch .....	8,512	Dec. 3, 1878	225	59	14	853
Registering-machine .....	R. H. Ingersoll .....	8,510	Dec. 3, 1878	221	58, 59	14	852
Retort for separating zinc from gold and silver alloys .....	E. Balbach, jr. ....	8,029	Jan. 8, 1878	433	127	13	83
Rivers, Removing bars of .....	H. F. Knapp .....	8,204	Apr. 30, 1878	1488	435	13	816
Rivet-setting machine .....	M. Bray .....	8,276	June 11, 1878	484	140	13	1079
Rock-drill for boring and drilling wells .....	J. P. Summers .....	8,390	Aug. 27, 1878	1008	204	14	344
Rocking-chair, Folding .....	T. E. Wakefield .....	8,217	May 7, 1878	308	88	13	893
Roof, Fire and water proof .....	J. New .....	8,414	Sept. 10, 1878	467	140	14	412
Rotary cutter .....	C. H. Mellor and M. L. Orum .....	8,265	May 28, 1878	1299	370	13	1008
Rubber articles .....	H. P. Dunbar and T. C. Lothrop .....	8,043	Jan. 22, 1878	927	271	13	169
<b>S.</b>							
Sand-paper holder .....	N. H. Fay .....	8,458	Oct. 22, 1878	943	275	14	631
Sap-spout .....	J. B. Sargent .....	8,495	Nov. 19, 1878	708	211	14	783
Sash-balance .....	H. F. Bond .....	8,410	Sept. 10, 1878	463	139	14	411
Satchel and traveling-bag handle .....	G. Havell .....	8,051	Jan. 22, 1878	940	274	13	170
Saw, Circular .....	J. K. Lockwood .....	8,076	Feb. 5, 1878	237	72	13	270
Saw-mill head block .....	J. Cain .....	8,162	Apr. 9, 1878	497	145	13	673



## Alphabetical list of reissues—Continued.

Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Saw-mill head-block .....	E. H. Stearns .....	8, 289	June 18, 1878	794	{ 235	13	1125
Saw-mill log-carriage .....	W. Lamb .....	8, 150	Apr. 2, 1878	232	67		
Saw mills, Direct-acting steam-feed works for circular .....	D. C. Prescott .....	8, 160	Apr. 9, 1878	494	144	13	672
Saw mills, Friction-feed clutch for circular .....	J. W. Zimmerman .....	8, 339	July 16, 1878	786	225	14	116
Saw-tooth, Insertible .....	W. P. Miller .....	8, 323	July 9, 1878	533	152	14	80
Scarf .....	C. Loeb .....	8, 322	July 9, 1878	532	152	14	80
Screw, Drive .....	D. F. Fetter .....	8, 121	Mar. 12, 1878	523	160	13	498
Seeder .....	J. F. Keller .....	8, 343	July 23, 1878	1062	304	14	155
Seeder .....	J. F. Keller .....	8, 344	July 23, 1878	1062	305	14	155
Seeder and cultivator, Broadcast .....	G. Esterly .....	8, 385	Aug. 20, 1878	722	216	14	305
Seeding-machine .....	J. D. Harrison .....	8, 394	Sept. 3, 1878	214	66	14	375
Seeding-machine .....	A. Putnam .....	8, 122	Mar. 12, 1878	524	160	13	498
Sewing-machine .....	A. Beck .....	8, 063	Jan. 29, 1878	1225	360	13	222
Sewing-machine .....	G. Hancock .....	8, 028	Jan. 8, 1878	1132	127	13	83
Sewing-machine .....	G. Hancock .....	8, 178	Apr. 16, 1878	835	241	13	721
Sewing-machine .....	C. F. Harlow .....	8, 283	June 11, 1878	492	142	13	1080
Sewing-machine .....	L. Heery .....	8, 499	Nov. 19, 1878	715	{ 213	14	784
Sewing-machine ruffling attachment .....	J. A. Davis .....	8, 176	Apr. 16, 1878	831	240		
Sewing-machine shuttle .....	G. W. Hunter .....	8, 285	June 11, 1878	495	143	13	1080
Sewing-machine table .....	W. H. Boyer .....	8, 333	July 16, 1878	777	222	14	115
Sewing-machine tuck-creasing attachment .....	I. M. Rose .....	8, 236	May 21, 1878	956	274	13	960
Sewing-machines, Mechanism for marking cloth in .....	H. W. Fuller .....	8, 103	Feb. 26, 1878	969	285	13	405
Shearing machine, Animal .....	R. T. Smith .....	8, 052	Jan. 22, 1878	941	274	13	171
Sheet-metal elbow .....	A. Syverson .....	8, 031	Jan. 8, 1878	435	128	13	83
Sheet-metal pipe-joint .....	J. Moore .....	8, 214	May 7, 1878	306	87	13	862
Ships, Device for unloading grain from .....	W. Stanton .....	8, 452	Oct. 15, 1878	720	{ 208	14	506
Shirt and drawers, Combined .....	E. S. Bennett .....	8, 068	Feb. 5, 1878	230	70		
Shoe, Felt .....	C. W. Palmer and C. Houghton .....	8, 070	Feb. 5, 1878	232	71	13	269
Shoe-shanks, Machine for making metallic .....	J. Hyslop, jr .....	8, 163	Apr. 9, 1878	498	415	13	673
Shoe-tip .....	H. White .....	8, 263	May 28, 1878	1238	369	13	1007
Shot-manufacturing machine .....	B. Tatham .....	8, 083	Feb. 12, 1878	502	147	13	318
Shutter .....	A. G. Haumann .....	8, 118	Mar. 12, 1878	520	159	13	497
Sidewalks, Cover for openings in .....	W. Dale .....	8, 365	Aug. 6, 1878	210	67	14	232
Skirt, Hoop .....	T. B. DeForest and T. S. Gilbert .....	8, 378	Aug. 20, 1878	714	213	14	303
Slate-cleaner, Reservoir .....	A. W. Overbaugh .....	8, 241	May 21, 1878	963	275	13	961
Snuff-package .....	B. F. Weyman .....	8, 264	May 28, 1878	1239	369	13	1008
Soldering-iron .....	J. A. Bostwick .....	8, 406	Oct. 29, 1878	1194	347	14	670
Sower, Fertilizer .....	C. F. Johnson, jr .....	8, 247	May 21, 1878	969	277	13	962
Spring-seat .....	C. D. Flynt .....	8, 405	Sept. 10, 1878	458	138	14	410
Square and bevel, Try .....	I. J. Robinson .....	8, 058	Jan. 29, 1878	1221	358	13	222
Square, Dress-maker's .....	C. H. Griffin .....	8, 523	Dec. 17, 1878	794	218	14	941
Stamp-canceler .....	D. E. Eaton .....	8, 282	June 11, 1878	491	142	13	1080
Stamp, Hand .....	E. D. Chamberlain .....	8, 201	Apr. 23, 1878	1168	335	13	770
Stamp, Hand .....	J. F. W. Dorman .....	8, 223	May 7, 1878	316	90	13	864
Steam and air brakes, Coupling-valve for .....	J. W. Gardner and T. W. Ransom .....	8, 337	July 16, 1878	784	224	14	116
Steam-boiler .....	J. Firminich and F. P. Stiker .....	8, 494	Nov. 19, 1878	706	211	14	783
Steam-trap .....	J. H. Blessing .....	8, 286	June 18, 1878	789	234	13	1124
Stereoscope .....	C. H. Wheeler and J. A. Bazin .....	8, 218	May 7, 1878	309	88	13	863
Stocking-supporter clasp .....	R. Eberle .....	8, 522	Dec. 17, 1878	793	218	14	941
Stockings and other garments, Supporter for .....	B. J. Greely .....	8, 472	Oct. 29, 1878	1199	348	14	671
Stool, Piano .....	J. Bramble and H. M. Deihl .....	8, 294	June 25, 1878	1107	328	13	1170
Stools, Adjustable back for .....	T. J. Ross .....	8, 131	Mar. 19, 1878	812	247	13	546
Stove .....	R. Simpson .....	8, 137	Mar. 26, 1878	1098	333	13	591
Stove, Cooking .....	W. A. Moore .....	8, 111	Mar. 5, 1878	260	82	13	454
Stove, Heating .....	J. E. Gridley .....	8, 469	Oct. 29, 1878	1197	347	14	671
Stove, Parlor .....	D. E. Paris .....	8, 336	July 16, 1878	782	224	14	116
Stove-pipe joint .....	D. L. Milliken and O. M. Pillsbury .....	8, 356	July 30, 1878	1365	332	14	197
Stoves, Culinary attachment to base-burning heating .....	J. Dwyer and G. H. Barbour .....	8, 101	Feb. 26, 1878	965	284	13	404
Straw-cutter .....	T. E. Marable .....	8, 395	Sept. 3, 1878	215	66	14	376
Stuffing-box for steam-engines .....	C. T. Sleeper .....	8, 335	July 16, 1878	779	223	14	115
Syringe, Flexible .....	M. Mattson .....	8, 238	May 21, 1878	950	274	13	960
T.							
Tea-pot .....	N. Plympton .....	8, 315	July 2, 1878	277	82	14	43
Telephone, Speaking .....	J. J. McTighe .....	8, 248	May 21, 1878	971	277	13	962
Thread-finishing device .....	T. Kohn .....	8, 301	June 25, 1878	1116	330	13	1172
Time-lock .....	S. A. Little .....	8, 035	Jan. 8, 1878	439	129	13	84
Tobacco-plugs, Finishing .....	A. Miller and C. Worley .....	8, 060	Jan. 29, 1878	1222	359	13	222
Tool-holder .....	J. A. B. Williams .....	8, 360	Aug. 6, 1878	203	65	14	232
Toy money-box .....	J. W. Hoard .....	8, 170	Apr. 9, 1878	505	147	13	674
Track-clearer .....	A. Day .....	8, 388	Aug. 27, 1878	1003	293	14	344
Traction-engine .....	G. Rogers .....	8, 164	Apr. 9, 1878	499	146	13	673
Traction-engine .....	G. Rogers .....	8, 526	Dec. 17, 1878	800	219	14	942
Traveling-cap .....	A. Schwarz .....	8, 508	Nov. 26, 1878	962	279	14	819
Trimming .....	G. Simon .....	8, 423	Sept. 17, 1878	699	205	14	416
Truck, Barrel .....	J. O. A. Bennett .....	8, 092	Feb. 19, 1878	734	215	13	362
Truck, Car .....	A. Higley .....	8, 381	Aug. 20, 1878	718	215	14	304
Truck shifting apparatus, Car .....	R. H. Ramsey .....	8, 250	May 28, 1878	1292	368	13	1007
Trunk .....	J. C. Locke .....	8, 520	Dec. 10, 1878	484	136	14	896
Trunk .....	E. Semple .....	8, 521	Dec. 10, 1878	486	136	14	896
Tuyere .....	T. F. Witherbee .....	8, 033	Jan. 8, 1878	437	128	13	84
Type, Elastic-faced printing .....	A. H. Rogers .....	8, 401	Sept. 3, 1878	222	69	14	376
U.							
Umbrella-handle .....	G. W. Tucker .....	8, 425	Sept. 24, 1878	955	280	14	482
Umbrella-handle .....	G. W. Tucker .....	8, 426	Sept. 24, 1878	956	280	14	482
Umbrella-rib tip .....	A. A. Valentine and H. A. Morrison .....	8, 075	Feb. 5, 1878	234	72	13	269

*Alphabetical list of reissues—Continued.*

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				Spec.	Dr'E.	Vol.	Page.
Under-clothing .....	S. T. Converse .....	8, 435	Sept. 24, 1878	966	282	14	483
Undersuit, Combination .....	C. L. Bradley .....	8, 069	Feb. 5, 1878	231	71	13	269
V.							
Valve attachment to utilize escape-steam, Safety .....	H. G. Ashton .....	8, 211	May 7, 1878	302	87	13	862
Valve, Balanced and cut-off .....	J. W. Thompson .....	8, 434	Sept. 24, 1878	964	282	14	483
Valve-gear .....	F. H. Ball .....	8, 077	Feb. 12, 1878	496	146	13	317
Valve-gear, Steam-engine .....	J. W. Thompson .....	8, 432	Sept. 24, 1878	961	281	14	483
Valve-gear, Steam-engine .....	J. W. Thompson .....	8, 433	Sept. 24, 1878	963	282	14	483
Valve-gear, Steam-engine .....	J. V. Tift and W. C. Bryant .....	8, 047	Jan. 22, 1878	936	273	13	170
Valve, Globe .....	J. Powell .....	8, 367	Aug. 13, 1878	455	139	14	266
Valve, Globe .....	J. Powell .....	8, 368	Aug. 13, 1878	458	139	14	266
Valve, Steam-engine .....	O. Adams .....	8, 036	Jan. 8, 1878	441	130	13	84
Vault-cover, Illuminating .....	W. Dale .....	8, 295	June 25, 1878	1110	329	13	1171
Vaults, areas, &c., Illuminating-door for inclosing .....	T. Hyatt .....	8, 307	June 25, 1878	1123	332	13	1172
Vehicle-axle .....	W. Beers .....	8, 384	Aug. 20, 1878	721	215	14	305
Vehicle-spring .....	E. Chamberlin .....	8, 449	Oct. 15, 1878	716	207	14	596
Vehicle-spring .....	E. Chamberlin .....	8, 450	Oct. 15, 1878	717	208	14	596
Vehicle-spring .....	W. F. Whitney .....	8, 348	July 23, 1878	1066	306	14	156
Vehicle-spring .....	W. F. Whitney .....	8, 517	Dec. 10, 1878	481	136	14	896
Vehicle torsion-spring .....	C. W. Saladee .....	8, 135	Mar. 26, 1878	1091	331	13	591
Vehicle, Spring side-bar for .....	J. Tilton .....	8, 415	Sept. 17, 1878	690	203	14	416
Velocipede .....	H. A. Reynolds .....	8, 252	May 28, 1878	1284	366	13	1005
W.							
Washing-machine .....	L. Caldwell .....	8, 134	Mar. 26, 1878	1089	331	13	590
Waste-pipe trap .....	J. L. Turner .....	8, 281	June 11, 1878	490	142	13	1080
Watch-cases, Center-rim for .....	D. H. Pearce and A. W. Taft .....	8, 396	Sept. 3, 1878	216	66	14	376
Watch-chain bar .....	W. S. Hicks .....	8, 273	June 4, 1878	226	72	13	1044
Water-closet bowls, Drip-tray for .....	C. Harrison .....	8, 189	Apr. 23, 1878	1154	{ 331 } 332	13	768
Water-elevator, Windlass .....	R. T. Stokes .....	8, 271	June 4, 1878	224	71	13	1044
Water-meter piston .....	A. Bergstrom .....	8, 120	Mar. 12, 1878	522	160	13	408
Water-tube boiler .....	C. Tyson .....	8, 062	Jan. 29, 1878	1224	359	13	222
Water-wheel .....	D. Cushman .....	8, 049	Jan. 22, 1878	938	273	13	170
Well, Petroleum .....	E. M. Stevenson .....	8, 287	June 18, 1878	791	235	13	1124
Wind-engine .....	I. H. Palmer .....	8, 235	May 14, 1878	628	175	13	910
Wind-engine .....	P. C. Perkins .....	8, 443	Oct. 8, 1878	459	133	14	557
Windlass .....	J. P. Manton .....	8, 303	June 25, 1878	1118	{ 330 } 331	13	1172
Windlasses, Locking-gear for .....	G. H. Remington and J. P. Man- ton .....	8, 524	Dec. 17, 1878	798	219	14	941
Window-cleaner .....	W. C. Gayton .....	8, 393	Sept. 3, 1878	213	65	14	375
Wire-barbing tool .....	J. H. Hill and W. H. Jayne .....	8, 306	June 25, 1878	1122	331	13	1172
Wire-cloth, Machine-painted .....	C. H. Waters .....	8, 023	Jan. 1, 1878	213	.....	13	40
Wire-twisting machine .....	C. Shortau .....	8, 032	Jan. 8, 1878	437	128	13	84
Wool-washing machine .....	J. K. Proctor .....	8, 473	Oct. 29, 1878	1200	348	14	672
Wrench .....	J. McLaren .....	8, 064	Jan. 29, 1878	1227	360	13	223
Y.							
Yarn, Machine for dressing and sizing .....	B. Saunders .....	8, 117	Mar. 12, 1878	519	{ 153 } 159	13	497
Yarn, Machine for drying and beaming .....	W. Lancaster and J. Bullough .....	8, 474	Oct. 29, 1878	1201	349	14	672

## ALPHABETICAL LIST OF TRADE-MARKS.

For what purpose.	Name of patentee.	No.	Date.	Official Gazette.	
				Vol.	Page.
A.					
Accordions, and other reed, pipe, and flute instruments . . .	National Musical Instrument Manufacturing Company.	6,497	Aug. 20, 1878	14	272
Adhesive materials . . . . .	D. D. Comes . . . . .	5,846	Apr. 9, 1878	13	638
Ague-cures . . . . .	M. C. White . . . . .	5,938	Apr. 23, 1878	13	730
Alcohol . . . . .	C. H. Graves . . . . .	6,582	Sept. 17, 1878	14	416
Ale . . . . .	H. & G. Simonds . . . . .	6,868	Dec. 10, 1878	14	862
Ale and porter . . . . .	Burnell & Simpkins . . . . .	6,431	July 30, 1878	14	160
Ales and lager-beer . . . . .	Quinn & Nolan . . . . .	6,303	July 2, 1878	14	7
Alimentary preparations, Concentrated . . . . .	D. St. Amant & Son . . . . .	6,663	Oct. 1, 1878	14	483
Alloy for the manufacture of plated ware, Metallic . . . . .	Brown & Brothers . . . . .	6,535	Sept. 3, 1878	14	348
Alloy of metal . . . . .	Smith & Egge Manufacturing Company.	6,739	Oct. 22, 1878	14	602
Animal-traps . . . . .	R. E. Dietz . . . . .	5,984	Apr. 30, 1878	13	774
Anti-rheumatic mixture . . . . .	W. L. Jurgibewicz . . . . .	6,348	July 9, 1878	14	48
Antiseptic, deodorizer, and embalmer . . . . .	J. S. Plumb . . . . .	5,665	Feb. 19, 1878	13	326
Apparel, Ladies' and children's wearing . . . . .	Siegel Brothers & Co . . . . .	6,522	Aug. 27, 1878	14	310
Articles of clothing . . . . .	Double Thread Sewing Company . . . . .	5,497	Jan. 8, 1878	13	48
Articles of clothing . . . . .	Double Thread Sewing Company . . . . .	5,498	Jan. 8, 1878	13	48
Article of food . . . . .	W. W. Treat . . . . .	5,589	Jan. 29, 1878	13	180
Atomizer, Cologne . . . . .	Vogeler, Son & Co . . . . .	6,896	Dec. 17, 1878	14	904
Axes . . . . .	Kloman, Park & Co . . . . .	6,234	June 18, 1878	13	1083
Axes . . . . .	Markley, Alling & Co . . . . .	5,901	Apr. 23, 1878	13	729
Axes and hatchets . . . . .	W. H. Crossman & Brother . . . . .	6,854	Dec. 3, 1878	14	824
Axle-grease . . . . .	Udell, Schmieding & Co . . . . .	6,218	June 11, 1878	13	1048
B.					
Bacon, hams, and cured and pickled meats . . . . .	S. Dally . . . . .	5,483	Jan. 8, 1878	13	48
Baking and yeast powder . . . . .	Jewett & Sherman Company . . . . .	6,520	Aug. 27, 1878	14	310
Baking-powder . . . . .	C. E. Andrews & Co . . . . .	5,714	Mar. 12, 1878	13	457
Baking-powder . . . . .	C. E. Andrews & Co . . . . .	6,461	Aug. 13, 1878	14	236
Baking-powder . . . . .	C. E. Andrews & Co . . . . .	6,661	Oct. 1, 1878	14	488
Baking-powder . . . . .	Bennett & Sloan . . . . .	6,227	June 18, 1878	13	1083
Baking-powder . . . . .	Carter Brothers & Co . . . . .	6,136	May 28, 1878	13	970
Baking-powder . . . . .	Cleveland Brothers . . . . .	5,875	Apr. 16, 1878	13	678
Baking-powder . . . . .	Coburn & Co . . . . .	5,953	Apr. 30, 1878	13	773
Baking-powder . . . . .	W. R. Forsyth & Co . . . . .	5,718	Mar. 12, 1878	13	457
Baking-powder . . . . .	G. W. Kendall . . . . .	6,450	Aug. 6, 1878	14	206
Baking-powder . . . . .	W. D. McLaren . . . . .	6,517	Aug. 27, 1878	14	310
Baking-powder . . . . .	Palmer Baking Powder Company . . . . .	5,664	Feb. 19, 1878	13	326
Baking-powder . . . . .	J. H. Pitt . . . . .	5,586	Jan. 29, 1878	13	180
Baking-powder . . . . .	S. S. Schindler and C. H. S. Davis . . . . .	5,708	Mar. 5, 1878	13	410
Baking-powder . . . . .	Smith, Hanway & Co . . . . .	5,668	Feb. 19, 1878	13	326
Baking-powder . . . . .	Smith, Hanway & Co . . . . .	5,834	Apr. 9, 1878	13	638
Baking-powders . . . . .	J. Stiner . . . . .	5,966	Apr. 30, 1878	13	773
Baking-powders . . . . .	J. C. Grant . . . . .	6,736	Oct. 22, 1878	14	602
Baking-powders . . . . .	Sherman Brothers & Co . . . . .	6,597	Sept. 17, 1878	14	416
Balsam, Healing . . . . .	Sherman Brothers & Co . . . . .	6,598	Sept. 17, 1878	14	416
Base-ball supplies . . . . .	H. D. Whitbeck & Co . . . . .	6,299	June 25, 1878	13	1130
Batting, Cotton . . . . .	A. G. Spalding & Bro . . . . .	5,797	Mar. 26, 1878	13	550
Beautifier for the complexion . . . . .	Putnam, Hooker & Co . . . . .	6,606	Sept. 24, 1878	14	450
Beef, Dried . . . . .	D. M. Gale . . . . .	5,573	Jan. 29, 1878	13	180
Beef, pork, hams, &c., Smoked, dried, or cured . . . . .	C. H. Wilcox . . . . .	6,428	July 30, 1878	14	160
Beer . . . . .	C. J. Comstock . . . . .	6,487	Aug. 20, 1878	14	272
Beer, ale, and porter . . . . .	T. Grimes . . . . .	6,711	Oct. 8, 1878	14	526
Beer, Bottled birch or fermented . . . . .	Schramm & Schnabel . . . . .	6,862	Dec. 3, 1878	14	824
Beer, Lager . . . . .	M. Bartley . . . . .	6,782	Nov. 12, 1878	14	716
Beer, Lager . . . . .	Baur & Betz . . . . .	6,691	Oct. 8, 1878	14	526
Beer, Lager . . . . .	C. Conrad & Co . . . . .	6,376	July 16, 1878	14	86
Beer, Lager . . . . .	Delaney & Griffin . . . . .	6,414	July 30, 1878	14	160
Beer, Lager . . . . .	Feigenspen & Co . . . . .	6,247	June 18, 1878	13	1084
Beer, Lager . . . . .	F. Hinkel . . . . .	6,068	May 14, 1878	13	872
Beer, Lager . . . . .	J. Hoffman . . . . .	6,568	Sept. 10, 1878	14	380
Beer, Lager . . . . .	C. Joly . . . . .	5,686	Feb. 26, 1878	13	370
Beer, Lager . . . . .	R. Portner . . . . .	5,776	Mar. 19, 1878	13	501
Beer, Lager . . . . .	J. Winkelmeyer & Co . . . . .	6,701	Oct. 8, 1878	14	526
Beer, Prepared skins for racking . . . . .	C. Maegerlein & Son . . . . .	6,134	May 28, 1878	13	969
Beer, soda, sarsaparilla, and mineral waters and ginger-ale, Small . . . . .	R. Alexander . . . . .	6,411	July 30, 1878	14	160
Beeswax . . . . .	Wakeman & Fierz . . . . .	6,273	June 25, 1878	13	1130
Beltings and lacings, Leather . . . . .	A. Heim . . . . .	5,736	Mar. 12, 1878	13	457
Beverage . . . . .	D. E. Poor . . . . .	6,890	Dec. 17, 1878	14	904
Beverages, Carbonated . . . . .	Brandt Brothers . . . . .	5,532	Jan. 22, 1878	13	126
Beverages from lime-fruit . . . . .	H. H. Howard . . . . .	6,174	June 4, 1878	13	1012
Billiard-table cushions . . . . .	J. M. Brunswick & Balke Company . . . . .	6,602	Sept. 24, 1878	14	449
Biscuit . . . . .	Holmes & Co . . . . .	5,803	Apr. 2, 1878	13	598
Biscuits . . . . .	E. J. Larrabee & Co . . . . .	5,521	Jan. 15, 1878	13	11
Biscuits . . . . .	E. J. Larrabee & Co . . . . .	5,855	Apr. 16, 1878	13	677
Biscuits . . . . .	E. J. Larrabee & Co . . . . .	5,856	Apr. 16, 1878	13	677
Biscuits, crackers, &c . . . . .	W. G. Wilson & Co . . . . .	6,897	Dec. 17, 1878	14	904
Biscuits, crackers, cakes, and snaps . . . . .	R. Owens & Son . . . . .	6,238	June 18, 1878	13	1083
Biscuits, crackers, jumbles, snaps, and fancy cakes . . . . .	J. Pollock . . . . .	6,076	May 14, 1878	13	872
Bitters . . . . .	C. A. Aschermann . . . . .	6,244	June 18, 1878	13	1083
Bitters . . . . .	C. R. Burrage . . . . .	6,913	Dec. 17, 1878	14	904

*Alphabetical list of trade-marks—Continued.*

For what purpose.	Name of patentee.	No.	Date.	Official Gazette.	
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Bitters.....	T. Mesplis.....	6,360	July 16, 1878	14	86
Bitters.....	J. Verguole.....	6,080	May 14, 1878	13	872
Bitters.....	A. Walz.....	5,836	Apr. 23, 1878	13	730
Bitters, Tonic.....	J. Y. Kelly.....	5,785	Mar. 26, 1878	13	550
Blacking.....	J. S. Mason Company.....	5,613	Feb. 5, 1878	13	232
Blacking, Boot and shoe.....	Boyer & Co.....	6,473	Aug. 13, 1878	14	236
Blacking, Harness.....	I. Coriell.....	6,172	June 4, 1878	13	1012
Blacking, Shoe.....	C. H. Morse & Co.....	6,889	Dec. 17, 1878	14	904
Blankets.....	Murphy, Grant & Co.....	6,302	July 2, 1878	14	7
Blankets.....	L. Strauss & Co.....	6,288	June 25, 1878	13	1130
Blankets.....	L. Strauss & Co.....	6,289	June 25, 1878	13	1130
Blood powder or mixture, Articles of use and ornament made from a.....	Dibble Manufacturing Company.....	6,810	Nov. 19, 1878	14	750
Blue, Wash.....	F. Dameko.....	6,717	Oct. 15, 1878	14	562
Blue, Wash.....	Nürnberg Ultramarine Fabrik (J. Zeltner).....	5,746	Mar. 12, 1878	13	458
Blue, Wash.....	Nürnberg Ultramarine Fabrik (J. Zeltner).....	5,775	Mar. 19, 1878	13	501
Blue, Washing.....	H. Sawyer.....	6,049	May 14, 1878	13	871
Blue, Washing.....	H. Sawyer.....	6,678	Oct. 8, 1878	14	525
Boiler-felt.....	S. Radcliffe.....	6,686	Oct. 8, 1878	14	525
Boiler-iron.....	J. T. Ryerson.....	6,336	July 9, 1878	14	48
Boiler-iron.....	J. T. Ryerson.....	6,404	July 23, 1878	14	120
Boiler-scale eradicators.....	W. Goldstein.....	6,884	Dec. 17, 1878	14	903
Boiler-tube, Locomotive-engine.....	J. T. Ryerson.....	6,321	July 2, 1878	14	8
Bonaset bourbon tonic.....	H. Chambers.....	6,429	July 30, 1878	14	160
Boot and shoe tip.....	American Shoe Tip Company.....	6,829	Nov. 20, 1878	14	787
Boots and shoes.....	Double Thread Sewing Company.....	5,499	Jan. 8, 1878	13	48
Boots and shoes.....	Double Thread Sewing Company.....	5,500	Jan. 8, 1878	13	48
Boots and shoes.....	Hurst, Miller & Co.....	6,287	June 25, 1878	13	1130
Boots and shoes.....	W. F. Mayo.....	6,237	June 18, 1878	13	1063
Boots and shoes.....	C. W. Mundell.....	6,236	June 18, 1878	13	1063
Boots and shoes.....	J. Mundell & Co.....	5,970	Apr. 30, 1878	13	774
Boots and shoes.....	E. H. Stark & Co.....	5,905	Apr. 23, 1878	13	729
Boots and shoes.....	J. H. Walker.....	5,590	Jan. 29, 1878	13	180
Boots and shoes.....	J. H. Walker.....	5,695	Mar. 5, 1878	13	410
Boots and shoes made wholly or in part of India rubber.....	Goodyear's Metallic Rubber Shoe Company.....	6,165	June 4, 1878	13	1012
Boots, shoes, and slippers.....	Ordway & Clark.....	5,813	Apr. 2, 1878	13	596
Bottle-stoppers.....	K. Hutter.....	5,649	Feb. 12, 1878	13	278
Bottles, Nursing.....	Hagerty Brothers & Co.....	6,121	May 21, 1878	13	918
Braid.....	S. B. & M. Fleisher.....	6,208	June 11, 1878	13	1048
Braid.....	Spelman Brothers.....	6,421	July 30, 1878	14	160
Braid.....	Spelman Brothers.....	5,766	Mar. 19, 1878	13	501
Braid and tape.....	W. H. Stafford.....	6,744	Oct. 22, 1878	14	602
Braid and tape.....	W. H. Stafford.....	6,765	Oct. 29, 1878	14	636
Braid and tape.....	W. H. Stafford.....	6,766	Oct. 29, 1878	14	636
Braid, Worsted.....	A. C. Haynes.....	5,924	Apr. 23, 1878	13	729
Brandy.....	E. R. Martin & Co.....	6,014	May 7, 1878	13	819
Brass-band instruments.....	H. Distin.....	6,042	May 14, 1878	13	871
Bread.....	A. Brown.....	6,746	Oct. 22, 1878	14	602
Bread.....	E. A. Rosebrock.....	6,372	July 10, 1878	14	86
Bread-raising preparation.....	D. & L. Slade.....	5,934	Apr. 23, 1878	13	730
Brushes.....	J. L. Whiting.....	6,409	Aug. 13, 1878	14	236
Brushes.....	J. L. Whiting.....	6,470	Aug. 13, 1878	14	236
Brushes, Toilet and other.....	Meyer Brothers & Co.....	5,793	Mar. 26, 1878	13	550
Bucket, Well.....	Prewitt, Spurr & Co.....	6,705	Oct. 8, 1878	14	526
Buckskin, jeans, and doeskin cloths.....	J. Brown & Sons.....	6,619	Sept. 24, 1878	14	450
Butter compound.....	M. D. Strait.....	5,709	Mar. 5, 1878	13	410
Butter, Preparation for coloring.....	Wells, Richardson & Co.....	6,129	May 21, 1878	13	918
Butter, Print.....	A. E. Phillips.....	6,875	Dec. 10, 1878	14	862
Buttons.....	J. Jaff & Sohn.....	6,032	May 7, 1878	13	820
C.					
Cakes.....	S. Sides.....	6,828	Nov. 20, 1878	14	787
Calcimine, Prepared.....	G. I. Stevens.....	5,906	Apr. 23, 1878	13	729
Candles.....	Procter & Gamble.....	5,633	Feb. 12, 1878	13	278
Candy.....	Chase & Co.....	6,803	Nov. 19, 1878	14	750
Candy.....	O. R. Chase.....	6,385	July 23, 1878	14	120
Candy.....	E. Greenfield & Son.....	5,622	Feb. 5, 1878	13	232
Candy, Molasses.....	M. K. Robb.....	5,477	Jan. 1, 1878	13	8
Canned and hermetically-sealed goods.....	W. W. Boyer.....	5,899	Jan. 29, 1878	13	180
Canned baked beans.....	W. Underwood & Co.....	5,598	Jan. 29, 1878	13	180
Canned edibles.....	Hannibal Meat Company.....	6,583	Sept. 17, 1878	14	416
Canned edibles.....	Hannibal Meat Company.....	6,584	Sept. 17, 1878	14	416
Canned fish.....	Eagle Preserved Fish Company.....	6,814	Nov. 19, 1878	14	750
Canned fruits and vegetables.....	Eric Preserving Company.....	5,691	Mar. 5, 1878	13	410
Canned meat, fish, fruit, and vegetables.....	Fitzpatrick, Davis & Co.....	6,039	May 7, 1878	13	820
Canned meats.....	Kimberly Brothers.....	6,538	Sept. 3, 1878	14	348
Canned meats and fish.....	Saint Louis Beef Canning Company.....	5,550	Jan. 22, 1878	13	126
Canned meats and fish.....	J. G. Mezger & Co.....	6,011	May 7, 1878	13	819
Canned meats and fish.....	J. G. Mezger & Co.....	6,012	May 7, 1878	13	819
Canned soup, meats, fish, and fowl.....	J. H. W. Huckins.....	6,332	July 9, 1878	14	48
Cans, Metallic.....	G. H. Perkins.....	6,261	June 18, 1878	13	1064
Caps for toy pistols, &c.....	E. H. Wander.....	5,915	Apr. 23, 1878	13	729
Capsules for administering medicines.....	J. R. Platten.....	6,370	July 16, 1878	14	86
Capsules for administering medicines.....	J. R. Platten.....	6,767	Oct. 29, 1878	14	636
Capsules for bottles.....	Betts & Co.....	6,510	Aug. 27, 1878	14	310
Car-springs.....	Miller, Metcalf & Parkin.....	6,586	Sept. 17, 1878	14	416
Caramels.....	A. D. Curran & Co.....	6,613	Sept. 24, 1878	14	450
Cards, Playing.....	V. E. Manger.....	5,870	Apr. 16, 1878	13	678
Cards, Playing.....	New York Consolidated Card Company.....	6,723	Oct. 15, 1878	14	562
Carpet warp.....	J. E. Reynolds.....	5,520	Jan. 15, 1878	13	11
Carpet warp.....	J. E. Reynolds.....	5,806	Apr. 2, 1878	13	598

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For what purpose.	Name of patentee.	No.	Date.	Official Gazette.	
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Carpets .....	Roxbury Carpet Company .....	6,403	July 23, 1878	14	120
Carriage and saddlery hardware and trimmings .....	O. B. North & Co. ....	6,532	Sept. 3, 1878	14	348
Cartridges .....	Union Metallic Cartridge Company .....	6,708	Oct. 8, 1878	14	526
Cartridges and percussion-caps .....	Eley Brothers .....	6,581	Sept. 17, 1878	14	416
Cartridges and percussion-caps .....	Eley Brothers .....	6,591	Sept. 17, 1878	14	416
Cartridges and percussion-caps .....	Eley Brothers .....	6,790	Nov. 12, 1878	14	716
Cassimeres .....	F. Glazier .....	5,879	Apr. 16, 1878	13	678
Cassimeres .....	F. Glazier .....	6,437	Aug. 6, 1878	14	206
Cassimeres .....	Middlesex Company .....	5,560	Jan. 22, 1878	13	126
Catarh remedy .....	F. W. Wei De Meyer .....	5,943	Apr. 23, 1878	13	750
Catarh, throat, and pulmonary diseases, Remedies for .....	W. N. Deming .....	5,976	Apr. 30, 1878	13	774
Cement, Portland .....	S. L. Merchant .....	6,888	Dec. 17, 1878	14	904
Cements, Liquid .....	W. H. Sanger .....	6,731	Oct. 15, 1878	14	562
Champagne .....	Adams & Co. ....	6,601	Sept. 24, 1878	14	449
Champagne wine .....	Chapin & Gore .....	6,003	May 7, 1878	13	819
Champagne wine .....	Duminy & Co. ....	5,555	Jan. 22, 1878	13	126
Champagne wine .....	Krug & Co. ....	5,755	Mar. 19, 1878	13	501
Champagne wine .....	Krug & Co. ....	5,756	Mar. 19, 1878	13	501
Champagne wine, Moët and Chandon .....	Remaud, Francois & Co. ....	5,587	Jan. 29, 1878	13	180
Champagnes .....	J. J. Berenburg .....	6,914	Dec. 17, 1878	14	904
Chains .....	Smith & Egge Manufacturing Company .....	5,890	Apr. 16, 1878	13	678
Cheese .....	G. S. Hart .....	6,133	May 28, 1878	13	969
Cheese .....	G. S. Hart .....	6,170	June 4, 1878	13	1012
Chemical compound, Disinfecting .....	Hance Brothers & White .....	6,718	Oct. 15, 1878	14	562
Chemical compound for the complexion .....	C. R. Burrage .....	6,366	July 16, 1878	14	86
Chemical preparation for washing, cleansing, soap-making, &c. ....	New York Chemical Works .....	6,093	May 21, 1878	13	917
Chemical products, Certain .....	Solvay & Co. ....	5,946	Apr. 23, 1878	13	730
Chemical solution for preserving dead bodies .....	R. Allektion Company .....	5,933	Apr. 23, 1878	13	730
Chemicals .....	A. Pirz .....	6,485	Aug. 20, 1878	14	272
Chemicals and acids .....	Pennsylvania Salt Manufacturing Company .....	5,504	Jan. 15, 1878	13	11
Chocolate, Broma and cocoa .....	D. Ghirardelli .....	6,916	Dec. 17, 1878	14	904
Chocolate, Prepared .....	E. Guittard .....	6,858	Dec. 3, 1878	14	824
Churn .....	Tiffin Union Churn Company .....	6,451	Aug. 6, 1878	14	206
Cider .....	Green & Clark .....	6,377	July 16, 1878	14	86
Cider, Sparkling russet .....	B. F. Merritt .....	6,842	Nov. 26, 1878	14	788
Cigar-box .....	F. Hauschildt .....	6,552	Sept. 3, 1878	14	348
Cigar-boxes .....	P. Schneider .....	5,961	Apr. 30, 1878	13	773
Cigar-boxes .....	P. Schneider .....	5,962	Apr. 30, 1878	13	773
Cigarettes .....	Gorfine Brothers .....	6,003	Sept. 24, 1878	14	450
Cigarettes .....	Seidenberg & Co. ....	6,135	May 28, 1878	13	970
Cigarettes and smoking and chewing tobacco .....	D. Hirsch & Co. ....	6,306	July 2, 1878	14	8
Cigarettes and smoking and chewing tobacco .....	D. Hirsch & Co. ....	6,307	July 2, 1878	14	8
Cigarettes and smoking and chewing tobacco .....	D. Hirsch & Co. ....	6,308	July 2, 1878	14	8
Cigarettes and smoking and chewing tobacco .....	D. Hirsch & Co. ....	6,309	July 2, 1878	14	8
Cigars .....	C. A. Ahrens .....	5,771	Mar. 19, 1878	13	501
Cigars .....	E. S. Allen & Co. ....	6,023	May 7, 1878	13	820
Cigars .....	J. R. Angulo .....	6,690	Oct. 8, 1878	14	525
Cigars .....	E. Aschermann & Co. ....	6,187	June 11, 1878	13	1047
Cigars .....	J. Baxter .....	6,189	June 11, 1878	13	1047
Cigars .....	Beckman, Noble & Co. ....	5,697	Mar. 5, 1878	13	410
Cigars .....	Beckman, Noble & Co. ....	5,698	Mar. 5, 1878	13	410
Cigars .....	Beckman, Noble & Co. ....	5,716	Mar. 12, 1878	13	457
Cigars .....	E. Bemis, jr. ....	6,536	Sept. 3, 1878	14	348
Cigars .....	E. Block & Son .....	6,768	Nov. 5, 1878	14	680
Cigars .....	Bondy & Lederer .....	6,602	Oct. 8, 1878	14	526
Cigars .....	Bondy & Lederer .....	6,603	Oct. 8, 1878	14	526
Cigars .....	Bondy & Lederer .....	6,694	Oct. 8, 1878	14	526
Cigars .....	Buchanan & Lyall .....	5,685	Feb. 26, 1878	13	370
Cigars .....	C. Brewer & Sons .....	6,795	Nov. 12, 1878	14	716
Cigars .....	C. Brewer & Sons .....	6,796	Nov. 12, 1878	14	716
Cigars .....	C. Brewer & Sons .....	6,797	Nov. 12, 1878	14	716
Cigars .....	R. A. Brown .....	6,412	July 30, 1878	14	160
Cigars .....	California Cigar Box Company .....	6,490	Aug. 20, 1878	14	272
Cigars .....	R. Claudius .....	6,096	May 21, 1878	13	917
Cigars .....	L. Cohn .....	6,327	July 9, 1878	14	47
Cigars .....	M. J. Cohn & Co. ....	5,822	Apr. 2, 1878	13	598
Cigars .....	J. W. Crowell .....	5,821	Apr. 2, 1878	13	598
Cigars .....	J. D. Culp & Co. ....	6,747	Oct. 22, 1878	14	602
Cigars .....	H. Eggert .....	6,006	May 7, 1878	13	819
Cigars .....	S. Eliel .....	5,759	Mar. 19, 1878	13	501
Cigars .....	Estabrook & Eaton .....	6,820	Nov. 26, 1878	14	787
Cigars .....	Fay & Co. ....	6,272	June 25, 1878	13	1130
Cigars .....	G. Fehl & Co. ....	5,862	Apr. 16, 1878	13	677
Cigars .....	Foxen, Newman & Co. ....	6,007	May 7, 1878	13	819
Cigars .....	Foxen, Newman & Co. ....	6,132	May 28, 1878	13	969
Cigars .....	J. and A. Frey .....	6,156	May 28, 1878	13	970
Cigars .....	S. Fuguet & Sons .....	5,997	May 7, 1878	13	819
Cigars .....	S. Fuguet & Sons .....	6,313	July 2, 1878	14	8
Cigars .....	Gillen Brothers .....	5,735	Mar. 12, 1878	13	457
Cigars .....	Glacum & Schlosser .....	6,846	Nov. 26, 1878	14	788
Cigars .....	J. P. Goetz & Co. ....	6,065	May 14, 1878	13	871
Cigars .....	Gutman & Rice .....	6,286	June 25, 1878	13	1130
Cigars .....	Heilbronner & Josephs .....	6,704	Oct. 29, 1878	14	636
Cigars .....	S. F. Hess & Co. ....	5,978	Apr. 30, 1878	13	774
Cigars .....	E. Hilson .....	6,757	Oct. 29, 1878	14	636
Cigars .....	J. Hirsch .....	6,142	May 28, 1878	13	970
Cigars .....	W. Hunt .....	6,221	June 11, 1878	13	1048
Cigars .....	M. Jacoby .....	6,742	Oct. 22, 1878	14	602
Cigars .....	S. Jacoby & Co. ....	6,424	July 30, 1878	14	160
Cigars .....	Kaufmann Brothers & Bondy .....	5,472	Jan. 1, 1878	13	8
Cigars .....	G. A. Kent & Co. ....	6,553	Sept. 3, 1878	14	348
Cigars .....	Krohn, Feiss & Co. ....	6,572	Sept. 17, 1878	14	416
Cigars .....	Liebes Brothers & Co. ....	5,652	Feb. 12, 1878	13	278



## Alphabetical list of trade-marks—Continued.

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Cigars	Liebes Brothers & Co	5,653	Feb. 12, 1878	13	278
Cigars	Liebes Brothers & Co	6,067	Oct. 1, 1878	14	488
Cigars	J. D. Loomis	6,010	May 7, 1878	13	819
Cigars	J. D. Loomis	6,099	May 21, 1878	13	917
Cigars	J. D. Loomis	6,100	May 21, 1878	13	917
Cigars	J. D. Loomis	6,101	May 21, 1878	13	917
Cigars	S. Lowenthal & Co	6,002	May 7, 1878	13	819
Cigars	S. Lowenthal & Co	6,529	Sept. 3, 1878	14	248
Cigars	H. Muller	6,161	May 28, 1878	13	970
Cigars	H. Muller	6,867	Dec. 10, 1878	14	862
Cigars	H. Myers & Brothers	5,812	Apr. 2, 1878	13	586
Cigars	G. W. Nichols	5,614	Feb. 5, 1878	13	232
Cigars	W. Niessing	5,824	Apr. 2, 1878	13	586
Cigars	Oliver & Robinson	6,150	May 28, 1878	13	970
Cigars	C. Pelacio	5,930	Apr. 23, 1878	13	730
Cigars	C. Pelacio	5,931	Apr. 23, 1878	13	730
Cigars	C. G. Petersen	6,737	Oct. 22, 1878	14	602
Cigars	M. Riquelme	5,504	Jan. 22, 1878	13	126
Cigars	Rohlfing & Rabenstein	5,758	Mar. 10, 1878	13	501
Cigars	D. E. Rose	5,886	Apr. 16, 1878	13	678
Cigars	S. Salomon	5,711	Mar. 5, 1878	13	410
Cigars	S. Salomon	5,723	Mar. 12, 1878	13	457
Cigars	Sanchez & Haya	6,379	July 16, 1878	14	88
Cigars	J. Schmitt	5,791	Mar. 26, 1878	13	550
Cigars	T. Schunemann	5,913	Apr. 23, 1878	13	729
Cigars	T. Schunemann	6,322	July 2, 1878	14	8
Cigars	J. Schuwind	6,655	Oct. 1, 1878	14	488
Cigars	Seidenburg & Co	5,901	Apr. 30, 1878	13	774
Cigars	Seubert & Warner	6,750	Oct. 22, 1878	14	602
Cigars	B. A. Shotwell	6,801	Nov. 12, 1878	14	716
Cigars	W. Simpson	6,126	May 21, 1878	13	918
Cigars	W. Simpson	6,279	June 25, 1878	13	1130
Cigars	W. Simpson	6,849	Nov. 26, 1878	14	768
Cigars	M. M. Smith	5,567	Jan. 22, 1878	13	126
Cigars	M. M. Smith	5,568	Jan. 22, 1878	13	126
Cigars	B. Spinoza	6,502	Sept. 10, 1878	14	380
Cigars	H. Stahlschmidt	6,380	July 16, 1878	14	86
Cigars	Straiton & Storm	5,680	Feb. 26, 1878	13	370
Cigars	Sullivan & Burk	5,807	Apr. 2, 1878	13	596
Cigars	R. W. Tansill & Co	6,365	July 16, 1878	14	86
Cigars	I. Teichman	6,577	Sept. 17, 1878	14	416
Cigars	E. Tucker	5,017	Feb. 5, 1878	13	232
Cigars	C. Upmann	5,973	Apr. 30, 1878	13	774
Cigars	R. Vega	6,688	Oct. 8, 1878	14	525
Cigars	Voige & Winter	0,337	July 9, 1878	14	48
Cigars	Warnick & Brown	0,090	May 14, 1878	13	872
Cigars	H. Welsh	0,445	Aug. 6, 1878	14	206
Cigars	B. F. Weyman	6,154	May 28, 1878	13	970
Cigars	B. F. Weyman	0,625	Sept. 24, 1878	14	450
Cigars	B. F. Weyman	6,026	Sept. 24, 1878	14	450
Cigars	Woodside, Green & Labaree	6,022	May 7, 1878	13	820
Cigars	H. Zimmermann	6,802	Nov. 12, 1878	14	716
Cigars and cigarettes	L. Ash & Brother	0,256	June 18, 1878	13	1064
Cigars and cigarettes	Hautsch & Crouse	5,077	Feb. 26, 1878	13	370
Cigars and cigarettes	Harris Brothers	6,756	Oct. 20, 1878	14	656
Cigars and cigarettes	A. Lichtenstein & Brother	5,550	Jan. 22, 1878	13	126
Cigars and cigarettes	Levy Brothers	5,650	Feb. 12, 1878	13	278
Cigars and cigarettes	Levy Brothers	5,651	Feb. 12, 1878	13	278
Cigars and cigarettes	A. Lichtenstein & Brother	6,528	Sept. 3, 1878	14	348
Cigars and cigarettes	Mayer Brothers	6,774	Nov. 5, 1878	14	680
Cigars and cigarettes	Mayer Brothers	6,775	Nov. 5, 1878	14	680
Cigars and cigarettes	A. Moonelis	6,698	Oct. 8, 1878	14	526
Cigars and cigarettes	Seidenberg & Co	6,186	June 4, 1878	13	1012
Cigars and cigarettes	Straiton & Storm	0,706	Oct. 8, 1878	14	526
Cigars and cigarettes, fine-cut and plug chewing-tobacco, snuff, and smoking-tobacco	Buchanan & Lyall	5,950	Apr. 30, 1878	13	773
Cigars and smoking and chewing tobacco	Engelbrecht, Fox & Co	6,724	Oct. 15, 1878	14	562
Cigars and smoking and chewing tobacco	Engelbrecht, Fox & Co	6,725	Oct. 15, 1878	14	562
Cigars and smoking-tobacco	Deutsch & Fuchs	5,605	Feb. 5, 1878	13	232
Cigars, cigarettes, and cheroots	J. Blakely	5,830	Apr. 9, 1878	13	638
Cigars, cigarettes, and chewing-tobacco	E. Hilson	6,726	Oct. 15, 1878	14	562
Cigars, cigarettes, and chewing and smoking tobacco	Blaskopf & Brown	6,634	Oct. 1, 1878	14	487
Cigars, cigarettes, and chewing and smoking tobacco	Blaskopf & Brown	6,754	Oct. 29, 1878	14	686
Cigars, cigarettes, and chewing and smoking tobacco	S. Ottenberg & Brothers	6,651	Oct. 1, 1878	14	488
Cigars, cigarettes, and chewing and smoking tobacco	S. Ottenberg & Brothers	6,652	Oct. 1, 1878	14	488
Cigars, cigarettes, and chewing and smoking tobacco	S. Ottenberg & Brothers	6,653	Oct. 1, 1878	14	488
Cigars, cigarettes, and chewing and smoking tobacco	B. A. Shotwell	6,624	Sept. 24, 1878	14	450
Cigars, cigarettes, and chewing and smoking tobacco	J. R. Sutton	5,722	Mar. 12, 1878	13	457
Cigars, cigarettes, and chewing and smoking tobacco	J. R. Sutton	6,777	Oct. 8, 1878	14	525
Cigars, cigarettes, and smoking and chewing tobacco	D. Buckner	6,301	July 2, 1878	14	7
Cigars, cigarettes, and smoking and chewing tobacco	J. D. Culp & Co	6,028	May 7, 1878	13	820
Cigars, cigarettes, and smoking and chewing tobacco	F. P. Earle	6,804	Nov. 19, 1878	14	750
Cigars, cigarettes, and smoking and chewing tobacco	G. Grodjinski	0,331	July 9, 1878	14	48
Cigars, cigarettes, and smoking and chewing tobacco	Hall, Blair & Co	6,880	Oct. 8, 1878	14	525
Cigars, cigarettes, and smoking and chewing tobacco	E. Hilson	5,841	Apr. 9, 1878	13	638
Cigars, cigarettes, and smoking and chewing tobacco	E. Hilson	6,500	Aug. 20, 1878	14	272
Cigars, cigarettes, and smoking and chewing tobacco	D. Hirsch & Co	6,275	June 25, 1878	13	1130
Cigars, cigarettes, and smoking and chewing tobacco	M. Hirsch	6,343	July 9, 1878	14	48
Cigars, cigarettes, and smoking and chewing tobacco	D. Hirsch & Co	6,275	June 25, 1878	13	1130
Cigars, cigarettes, and smoking and chewing tobacco	Hirsch & Bendheim	6,808	Nov. 19, 1878	14	750
Cigars, cigarettes, and smoking and chewing tobacco	S. Jacoby & Co	5,944	Apr. 23, 1878	13	730
Cigars, cigarettes, and smoking and chewing tobacco	S. Jacoby & Co	5,956	Apr. 30, 1878	13	773
Cigars, cigarettes, and smoking and chewing tobacco	S. Jacoby & Co	6,573	Sept. 17, 1878	14	416
Cigars, cigarettes, and smoking and chewing tobacco	S. Jacoby & Co	6,614	Sept. 24, 1878	14	450
Cigars, cigarettes, and smoking and chewing tobacco	Kerbs & Spies	5,558	Jan. 22, 1878	13	120

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Cigars, cigarettes, and smoking and chewing tobacco.....	Kerbs & Spiess .....	5,575	Jan. 29, 1878	13	180
Cigars, cigarettes, and smoking and chewing tobacco.....	Kerbs & Spiess .....	5,570	Jan. 29, 1878	13	180
Cigars, cigarettes, and smoking and chewing tobacco.....	Kerbs & Spiess .....	5,577	Jan. 29, 1878	13	180
Cigars, cigarettes, and smoking and chewing tobacco.....	Kerbs & Spiess .....	5,578	Jan. 29, 1878	13	180
Cigars, cigarettes, and smoking and chewing tobacco.....	Kerbs & Spiess .....	5,579	Jan. 29, 1878	13	180
Cigars, cigarettes, and smoking and chewing tobacco.....	Kerbs & Spiess .....	5,580	Jan. 29, 1878	13	180
Cigars, cigarettes, and smoking and chewing tobacco.....	Kerbs & Spiess .....	5,581	Jan. 29, 1878	13	180
Cigars, cigarettes, and smoking and chewing tobacco.....	Kerbs & Spiess .....	5,582	Jan. 29, 1878	13	180
Cigars, cigarettes, and smoking and chewing tobacco.....	Kerbs & Spiess .....	5,583	Jan. 29, 1878	13	180
Cigars, cigarettes, and smoking and chewing tobacco.....	Kerbs & Spiess .....	5,584	Jan. 29, 1878	13	180
Cigars, cigarettes, and smoking and chewing tobacco.....	Kerbs & Spiess .....	5,585	Jan. 29, 1878	13	180
Cigars, cigarettes, and smoking and chewing tobacco.....	Kerbs & Spiess .....	5,808	Apr. 2, 1878	13	508
Cigars, cigarettes, and smoking and chewing tobacco.....	Kerbs & Spiess .....	5,832	Apr. 9, 1878	13	638
Cigars, cigarettes, and smoking and chewing tobacco.....	Kerbs & Spiess .....	5,957	Apr. 30, 1878	13	773
Cigars, cigarettes, and smoking and chewing tobacco.....	Kerbs & Spiess .....	6,297	June 25, 1878	13	1130
Cigars, cigarettes, and smoking and chewing tobacco.....	Kerbs & Spiess .....	6,493	Aug. 20, 1878	14	272
Cigars, cigarettes, and smoking and chewing tobacco.....	Kerbs & Spiess .....	6,673	Oct. 8, 1878	14	525
Cigars, cigarettes, and smoking and chewing tobacco.....	C. H. Klemm .....	6,713	Oct. 8, 1878	14	526
Cigars, cigarettes, and smoking and chewing tobacco.....	Lozano, Pendas & Co .....	6,044	May 14, 1878	13	871
Cigars, cigarettes, and smoking and chewing tobacco.....	Lozano, Pendas & Co .....	6,045	May 14, 1878	13	871
Cigars, cigarettes, and smoking and chewing tobacco.....	McCoy & Co .....	5,464	Jan. 1, 1878	13	8
Cigars, cigarettes, and smoking and chewing tobacco.....	McCoy & Co .....	5,465	Jan. 1, 1878	13	8
Cigars, cigarettes, and smoking and chewing tobacco.....	McCoy & Co .....	5,474	Jan. 1, 1878	13	8
Cigars, cigarettes, and smoking and chewing tobacco.....	McCoy & Co .....	5,561	Jan. 22, 1878	13	126
Cigars, cigarettes, and smoking and chewing tobacco.....	McCoy & Co .....	5,612	Feb. 5, 1878	13	232
Cigars, cigarettes, and smoking and chewing tobacco.....	McCoy & Co .....	6,102	May 21, 1878	13	917
Cigars, cigarettes, and smoking and chewing tobacco.....	McCoy & Co .....	6,290	June 18, 1878	13	1080
Cigars, cigarettes, and smoking and chewing tobacco.....	H. Nelson .....	5,958	Apr. 30, 1878	13	773
Cigars, cigarettes, and smoking and chewing tobacco.....	S. Rosenbaum .....	6,809	Nov. 19, 1878	14	750
Cigars, cigarettes, and smoking and chewing tobacco.....	B. A. Shotwell .....	6,632	Sept. 24, 1878	14	450
Cigars, cigarettes, and smoking and chewing tobacco.....	B. A. Shotwell .....	6,633	Sept. 24, 1878	14	450
Cigars, cigarettes, and smoking and chewing tobacco.....	Straiton & Storm .....	5,475	Jan. 1, 1878	13	8
Cigars, cigarettes, and smoking and chewing tobacco.....	I. R. Swzey .....	6,304	July 2, 1878	14	8
Cigars, cigarettes, and smoking and chewing tobacco.....	I. Underdorfer .....	6,158	May 28, 1878	13	970
Cigars, cigarettes, and smoking tobacco.....	Batchelor Brothers .....	6,213	June 11, 1878	13	1048
Cigars, cigarettes, and smoking tobacco.....	T. H. Hall .....	5,704	Mar. 5, 1878	13	410
Cigars, cigarettes, and smoking tobacco.....	T. H. Hall .....	5,719	Mar. 12, 1878	13	457
Cigars, cigarettes, and smoking tobacco.....	T. H. Hall .....	6,036	May 7, 1878	13	820
Cigars, cigarettes, and smoking tobacco.....	T. H. Hall .....	6,792	Nov. 12, 1878	14	710
Cigars, cigarettes, and smoking tobacco.....	S. Harnsheim & Brother .....	6,015	Dec. 17, 1878	14	904
Cigars, cigarettes, and smoking tobacco.....	M. Jacoby .....	5,970	Apr. 30, 1878	13	774
Cigars, cigarettes, and smoking tobacco.....	Lery Brothers .....	6,503	Aug. 20, 1878	14	272
Cigars, cigarettes, and smoking tobacco.....	J. Loewenherz .....	6,026	Apr. 23, 1878	13	730
Cigars, cigarettes, and smoking tobacco.....	McCoy & Co .....	5,562	Jan. 22, 1878	13	126
Cigars, cigarettes, and smoking tobacco.....	H. M. Morris .....	6,861	Dec. 3, 1878	14	824
Cigars, cigarettes, and smoking tobacco.....	Rath & Ferris .....	6,676	Oct. 8, 1878	14	525
Cigars, cigarettes, and smoking tobacco.....	E. A. Smith .....	6,145	May 28, 1878	13	970
Cigars, cigarettes, and smoking tobacco.....	Straiton & Storm .....	5,897	Apr. 16, 1878	13	677
Cigars, cigarettes, and smoking tobacco.....	Straiton & Storm .....	6,144	May 28, 1878	13	970
Cigars, cigarettes, cheroots, and smoking and chewing tobacco.....	J. Hirsch .....	6,807	Nov. 19, 1878	14	750
Cigars, cigarette, chewing and smoking tobacco, and snuff.....	Lichenstein Brothers & Co .....	5,899	Apr. 23, 1878	13	729
Cigars, cigarettes, fine-cut and plug chewing tobacco, smoking tobacco, and snuff.....	Lichenstein Brothers & Co .....	5,900	Apr. 23, 1878	13	729
Cigars, cigarettes, smoking and chewing tobacco.....	R. Ulmer .....	6,895	Dec. 17, 1878	14	904
Cigars, cigarettes, smoking and chewing tobacco, and snuff.....	G. W. Gail & Ax .....	6,369	July 10, 1878	14	86
Cigars, cigarettes, smoking and chewing tobacco, and snuff.....	C. Swartz & Co .....	6,152	May 28, 1878	13	970
Cigars, cigarettes, smoking and chewing tobacco, and snuff.....	P. Whitlock .....	6,600	Sept. 17, 1878	14	416
Cigars, cigarettes, smoking and chewing tobacco, and snuff.....	Whitlock & Northern .....	6,609	Sept. 24, 1878	14	450
Claims, Prepared .....	C. H. Jackson .....	6,671	Oct. 8, 1878	14	525
Clay .....	Star Clay Company .....	6,778	Nov. 5, 1878	14	680
Clay for crucibles .....	E. Thiele .....	6,393	July 23, 1878	14	120
Cleaning and polishing powders .....	H. S. Ziegler .....	6,565	Sept. 10, 1878	14	380
Cleansing and polishing preparation .....	N. T. Folsom & Co .....	6,784	Nov. 12, 1878	14	716
Clucks .....	H. J. Davies .....	6,116	May 21, 1878	13	918
Cloth, Water-proof .....	Rubberoid Company .....	6,427	July 30, 1878	14	160
Clothes-wringers .....	Peerless Wringer Company .....	6,516	Aug. 27, 1878	14	310
Cloths, Beaver .....	Bacon, Baldwin & Co .....	6,283	June 25, 1878	13	1130
Cloths, Beaver .....	Bacon, Baldwin & Co .....	6,284	June 25, 1878	13	1130
Clothing for men's, youths', and boys' wear .....	Naumburg, Craus, Lauer & Co .....	6,633	May 7, 1878	14	820
Clothing, men's and boys' .....	Banner Brothers .....	6,837	Nov. 26, 1878	14	788
Clothing, Oiled .....	A. J. Tower .....	6,788	Nov. 12, 1878	14	716
Coca-leaf, Medicinal preparation of .....	C. M. Fletcher .....	5,647	Feb. 12, 1878	13	278
Cocoa .....	H. Mailard .....	5,757	Mar. 19, 1878	13	501
Cocoa and chocolate, Preparations of .....	H. McCobb .....	6,819	Nov. 26, 1878	14	767
Cocoa, Preparations of .....	J. Epps & Co .....	6,513	Aug. 27, 1878	14	310
Coffee .....	P. Codlio & Mohlfeld .....	5,861	Apr. 16, 1878	13	677
Coffee .....	Coyle, Laughlin & Co .....	6,027	May 7, 1878	13	820
Coffee .....	T. C. Jenkins .....	5,609	Feb. 5, 1878	13	232
Coffee .....	T. C. Jenkins .....	5,610	Feb. 5, 1878	13	232
Coffee and spice .....	J. Prusso .....	6,439	Aug. 6, 1878	14	206
Coffee and spices .....	Weikel & Smith Spice Company .....	6,220	June 11, 1878	13	1048
Coffee extract or essence .....	P. Bachert .....	5,621	Feb. 5, 1878	13	232
Coffee, ground spices, pepper, and mustard, Roasted .....	E. Guitard .....	6,857	Dec. 3, 1878	14	824
Coffee, mustard, and spices .....	Wright, Gillies & Brother .....	6,082	May 14, 1878	13	872
Coffee, Roasted and ground .....	Fink, Brother & Co .....	5,877	Apr. 16, 1878	13	678
Coffee, Roasted and ground .....	W. J. Lonn .....	5,494	Jan. 8, 1878	13	48
Coffee, spices, and mustard .....	W. J. Fell .....	6,064	May 14, 1878	13	871
Coffee, spices, and mustard, Prepared .....	C. E. Andrews & Co .....	6,024	May 7, 1878	13	820
Coffee, spices, and mustard, Roasted and ground .....	Burns & Byram .....	6,108	May 21, 1878	13	918
Coffee, spices, and mustard, Roasted and ground .....	Weikel & Smith Spice Company .....	5,891	Apr. 16, 1878	13	678
Coffee, spices, and mustards .....	Weikel & Smith Spice Company .....	5,869	Apr. 16, 1878	13	678
Collars and cuffs .....	B. T. Babbitt .....	5,800	Apr. 2, 1878	13	597
Collars, cuffs, and bosoms .....	Reversible Collar Company .....	6,339	July 9, 1878	14	48
Collars, Horse .....	Dayton Leather and Collar Company .....	6,264	June 18, 1878	13	1084

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Collars made of linen, Standing	Pine, Adams & Dunham	5,929	Apr. 23, 1878	13	720
Cologne	W. T. Bactjer	6,952	Apr. 30, 1878	13	773
Cologne	F. W. Barnum	5,486	Jan. 1, 1878	13	8
Cologne	E. W. Hoyt & Co.	5,030	Feb. 12, 1878	13	277
Cologne	W. A. Hoyt	5,691	Feb. 19, 1878	13	326
Cologne	P. H. Kelley	6,087	May 14, 1878	12	672
Cologne	J. A. Lansing	6,502	Aug. 20, 1878	14	272
Cologne-water	W. J. Ansten	6,525	Sept. 3, 1878	14	244
Cologne-water	J. Davis	6,945	Nov. 26, 1878	14	788
Cologne-water	J. M. Farina	6,482	Aug. 20, 1878	14	272
Cologne-water	J. M. Farina	6,503	Sept. 10, 1878	14	389
Cologne-water	J. M. Farina	6,564	Sept. 10, 1878	14	389
Cologne-water	Wexford Company	6,909	Dec. 10, 1878	14	862
Cologne water and other toilet-waters	D. S. Brown & Co.	6,519	Aug. 27, 1878	14	316
Combs	Howard, Sanger & Co.	6,265	June 18, 1878	13	1094
Complexion and skin, Preparation for the	P. B. Bradlee	6,068	Oct. 8, 1878	14	525
Condiments, such as pickles, sauces, &c.	F. and J. Heinz	6,464	Aug. 13, 1878	14	226
Condition-powders	M. S. Teller	6,271	June 18, 1878	13	1094
Confectionery	J. Kriescher	5,597	Jan. 29, 1878	13	180
Confectionery	A. Slauson & Co.	6,268	June 18, 1878	13	1094
Confectionery	A. Slauson & Co.	6,269	June 18, 1878	13	1094
Confectionery	A. Slauson & Co.	6,270	June 18, 1878	13	1094
Cordials	M. Lang	5,745	Mar. 12, 1878	13	458
Corn, Preserved green	L. McMurray	5,546	Jan. 22, 1878	13	126
Corn-shellers	Kingsland, Ferguson & Co.	6,823	Nov. 26, 1878	14	787
Corn-starch	T. Kingsford & Son	6,315	July 2, 1878	14	8
Corset-clasps	J. G. Fitzpatrick	6,432	July 30, 1878	14	100
Corsets	D. H. Fanning	5,535	Jan. 22, 1878	13	126
Corsets	I. Newman & Co.	5,078	Feb. 26, 1878	13	370
Corsets	Ottenheimer Brothers	6,046	May 14, 1878	13	871
Corsets	Worcester Corset Company	6,545	Sept. 3, 1878	14	348
Corsets and bustles	L. Schiele & Co.	6,504	Sept. 17, 1878	14	416
Corsets and corset-clasps	N. Hyman	5,488	Jan. 8, 1878	13	48
Corsets and waists	J. G. Fitzpatrick	5,921	Apr. 23, 1878	13	729
Corsets, Ladies	B. A. Bourne	6,838	Nov. 26, 1878	14	786
Corsets, Ladies	C. A. Griawold	6,139	May 28, 1878	13	970
Cosmetic	S. R. Van Duzer	6,760	Oct. 29, 1878	14	636
Cosmetics	J. T. Burtis	6,783	Nov. 12, 1878	14	716
Cotton and woolen fabrics, Woven	H. Fogg & Co.	6,483	Aug. 20, 1878	14	272
Cotton fabrics	Hamilton Manufacturing Company	6,141	May 28, 1878	13	970
Cotton fabrics, Woven	Minot, Hooper & Co.	5,885	Apr. 10, 1878	13	673
Cotton-gins	Eagle Cotton Gin Company	6,368	July 10, 1878	14	85
Cotton goods	Burnes, Bancroft & Co.	5,488	Jan. 8, 1878	13	48
Cotton goods	J. Caswell & Co.	5,898	Apr. 23, 1878	13	729
Cotton goods	Lockwood Company	6,249	June 18, 1878	13	1064
Cotton goods	Nashua Manufacturing Company	6,162	May 28, 1878	13	970
Cotton goods	Neuss, Healein & Co.	5,070	Feb. 26, 1878	13	370
Cotton goods	Smith, Churchill & Scribner	6,656	Oct. 1, 1878	14	468
Cotton goods	F. Sweetser & Son	6,242	June 18, 1878	13	1063
Cotton jeans, drills, sheetings, and shirtings	A. A. Low & Brothers	6,278	June 25, 1878	13	1130
Cotton piece-goods	Langdon Manufacturing Company	6,235	June 18, 1878	13	1063
Cotton piece-goods	Naumkeag Steam Cotton Company	6,400	July 23, 1878	14	120
Cotton-press	Kingsland, Ferguson & Co.	6,335	July 9, 1878	14	48
Cotton-prints	Coffin, Altemus & Co.	6,399	July 23, 1878	14	120
Cotton sheetings	Coffin, Altemus & Co.	5,700	Mar. 5, 1878	12	410
Cotton sheetings, shirtings, and other cotton goods	Jackson Company	5,526	Jan. 15, 1878	13	11
Cotton sheetings, shirtings, and other cotton goods	Jackson Company	5,527	Jan. 15, 1878	13	11
Cotton yarn	L. G. Hansen	5,894	Apr. 23, 1878	13	729
Cough and lung sirup	A. J. Flagg	5,515	Jan. 15, 1878	13	11
Cough, cold, &c., Remedies for	A. C. Simpson	6,125	May 21, 1878	13	918
Cough-mixture	Rhodes & Lewis	5,032	Apr. 23, 1878	13	139
Cough-mixtures	W. H. Jacobs	5,737	Mar. 12, 1878	13	453
Cough-remedies	C. White	6,752	Oct. 22, 1878	14	602
Cough-sirup	Williams & Moore	6,660	Oct. 1, 1878	14	468
Crackers, biscuits, or wafers	G. W. Heathman & Co.	5,471	Jan. 1, 1878	13	8
Cream of tartar	B. T. Babbitt	6,700	Apr. 2, 1878	13	597
Cream of tartar	C. R. Burrage	6,230	June 18, 1878	13	1063
Cream tartar	E. S. Taylor	6,055	May 14, 1878	13	871
Cultivators	E. S. & F. Bateman	5,901	Feb. 5, 1878	13	232
Cutlery	G. V. Brecht	5,782	Mar. 26, 1878	13	550
Cutlery	W. Brokhahne	5,602	Feb. 5, 1878	13	232
Cutlery	W. Brokhahne	5,603	Feb. 5, 1878	13	232
Cutlery	J. Rodgers & Sons	6,816	Nov. 10, 1878	14	750
Cutlery	G. Wostenholm & Son	6,870	Dec. 10, 1878	14	862
D.					
Dental supplies	H. D. Justi	5,882	Apr. 16, 1878	13	678
Dentifrice, Liquid	S. R. Van Duzer	6,759	Oct. 29, 1878	14	636
Door-springs	Van Wagner & Williams	5,042	Apr. 23, 1878	13	730
Drugs and chemicals	W. S. Powell	6,110	May 21, 1878	13	918
Dry-goods	Eddystone Manufacturing Company (limited).	6,127	May 21, 1878	13	918
Dry-goods	Eddystone Manufacturing Company (limited).	6,157	May 28, 1878	13	970
Dry-goods	Hood, Bonbright & Co.	5,985	Apr. 30, 1878	13	774
Dry-goods	C. M. Williams	6,460	Aug. 13, 1878	14	236
Dry-goods	A. Zerban	5,727	Mar. 12, 1878	13	477
Dry-goods, Fancy	Fox & Plant	5,811	Apr. 2, 1878	13	556
Dye-stuffs	H. H. Howard	6,175	June 4, 1878	13	1012
Dye-woods, Extracts and carmines of	J. C. Bloomfield & Co.	5,975	Apr. 30, 1878	13	774
E.					
Earthenware	Knowles, Taylor & Knowles	5,503	Jan. 15, 1878	13	10

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Edge-tools.....	Collins Company.....	5,681	Feb. 26, 1878	13	370
Edge-tools.....	Collins Company.....	5,778	Mar. 19, 1878	13	501
Edge-tools.....	Collins Company.....	5,779	Mar. 19, 1878	13	501
Edge-tools.....	Collins Company.....	6,111	May 21, 1878	13	918
Edge-tools.....	Collins Company.....	6,112	May 21, 1878	13	918
Embalming preparations.....	Egyptian Embalmer Company.....	6,062	May 14, 1878	13	871
Encaustic tiling.....	Fischer & Lansing.....	5,476	Jan. 1, 1878	13	8
Essence of meats.....	London Manufacturing Company.....	6,072	May 14, 1878	13	872
Eye-water.....	A. E. Brady.....	5,820	Apr. 2, 1878	13	698
F.					
Farm and agricultural implements, machines, and apparatus.	A. B. Farquhar.....	6,883	Dec. 17, 1878	14	903
Feathers and fancy feathers generally, Ostrich.....	Welch & Creighton.....	5,914	Apr. 23, 1878	13	729
Fertilizers.....	Ames, Manning & Ames.....	5,712	Mar. 5, 1878	13	410
Fertilizers.....	W. H. Bowker & Co.....	5,627	Feb. 12, 1878	13	277
Fertilizers.....	H. Brown & Co.....	6,026	May 7, 1878	13	820
Fertilizers.....	Chemical Company of Canton.....	6,695	Oct. 8, 1878	14	526
Fertilizers.....	H. Duval & Co.....	6,434	Aug. 6, 1878	14	206
Fertilizers.....	Patapasco Guano Company.....	5,816	Apr. 2, 1878	13	598
Fertilizers and fertilizing materials.....	Rafferty & Williams.....	5,750	Mar. 12, 1878	13	458
Fertilizers, Artificial.....	L. Seldner & Sons.....	5,790	Mar. 26, 1878	13	550
Fertilizers, manures, and fertilizing compounds and ingredients.	W. H. Bowker & Co.....	5,511	Jan. 15, 1878	13	11
Fertilizing composition.....	R. W. L. Rasin & Co.....	6,630	Sept. 24, 1878	14	450
Fever specific.....	J. G. De Bretton.....	5,572	Jan. 29, 1878	13	180
Files.....	New American File Company.....	6,514	Aug. 27, 1878	14	310
Files.....	Nicholson File Company.....	6,034	May 7, 1878	13	820
Files.....	Western File Company.....	5,939	Apr. 23, 1878	13	730
Files.....	Western File Company.....	5,940	Apr. 23, 1878	13	730
Files.....	Western File Company.....	5,941	Apr. 23, 1878	13	730
Fire-extinguishing compound.....	Protective Fire Annihilator Company.....	6,395	July 23, 1878	14	120
Fire-places and stoves, Open.....	O. F. and O. C. Mehurin.....	6,589	Sept. 10, 1878	14	380
Fish, Boned cod.....	H. Mayo & Co.....	6,554	Sept. 3, 1878	14	348
Fish, Cod.....	Lynde & Hough.....	6,364	July 16, 1878	14	86
Fish, Cod.....	G. P. Trigg & Co.....	5,809	Apr. 2, 1878	13	598
Fish of all kinds.....	Potter & Wrightington.....	5,747	Mar. 12, 1878	13	458
Flannels, Shaker.....	Damon & Almy.....	6,169	June 4, 1878	13	1012
Flannels, sheetings, shirtings, denims, &c.....	E. H. Allen, jr.....	6,224	June 11, 1878	13	1048
Flavoring-extract.....	J. W. Colton.....	6,245	June 18, 1878	13	1083
Flavoring-extracts.....	J. W. Colton.....	6,191	June 11, 1878	13	1047
Flax threads, twines, and yarns.....	Smith & Dove Manufacturing Company.....	5,660	Feb. 19, 1878	13	326
Flour.....	C. B. Anders & Brother.....	6,384	July 23, 1878	14	120
Flour.....	H. Becker & Co.....	5,671	Feb. 26, 1878	13	370
Flour.....	H. Becker & Co.....	5,672	Feb. 26, 1878	13	370
Flour.....	Belknap & Boynton.....	6,618	Sept. 24, 1878	14	450
Flour.....	F. W. Bricey.....	5,845	Apr. 9, 1878	13	638
Flour.....	Empire Mill Company.....	5,491	Jan. 8, 1878	13	48
Flour.....	S. W. Farver & Co.....	6,805	Nov. 19, 1878	14	750
Flour.....	W. Finch.....	5,713	Mar. 5, 1878	13	410
Flour.....	J. H. Gambrill.....	6,763	Oct. 29, 1878	14	636
Flour.....	J. Gordon & Co.....	6,851	Nov. 26, 1878	14	788
Flour.....	Graham & Barbour.....	6,547	Sept. 3, 1878	14	348
Flour.....	Graham & Barbour.....	6,548	Sept. 3, 1878	14	348
Flour.....	C. N. Harrington.....	6,622	Sept. 24, 1878	14	450
Flour.....	H. F. Harrington.....	6,454	Aug. 13, 1878	14	236
Flour.....	G. V. Hecker & Co.....	5,675	Feb. 26, 1878	13	370
Flour.....	G. V. Hecker & Co.....	5,670	Feb. 26, 1878	13	370
Flour.....	G. V. Hecker & Co.....	5,692	Mar. 5, 1878	13	410
Flour.....	G. V. Hecker & Co.....	5,774	Mar. 19, 1878	13	501
Flour.....	G. V. Hecker & Co.....	5,823	Apr. 2, 1878	13	598
Flour.....	G. V. Hecker & Co.....	5,828	Apr. 9, 1878	13	638
Flour.....	G. V. Hecker & Co.....	6,008	May 7, 1878	13	819
Flour.....	G. V. Hecker & Co.....	6,067	May 14, 1878	13	871
Flour.....	G. V. Hecker & Co.....	6,438	Aug. 6, 1878	14	206
Flour.....	H. Hottel and L. Painter.....	5,693	Mar. 5, 1878	13	410
Flour.....	Kenly, Jenkins & Young.....	6,455	Aug. 13, 1878	14	236
Flour.....	Lanterman & Stewart.....	5,623	Feb. 5, 1878	13	232
Flour.....	S. S. Marvin & Co.....	6,344	July 9, 1878	14	48
Flour.....	S. S. Marvin & Co.....	6,346	July 9, 1878	14	48
Flour.....	S. S. Marvin & Co.....	6,347	July 9, 1878	14	48
Flour.....	J. O. Norris.....	6,515	Aug. 27, 1878	14	310
Flour.....	B. R. Pegram, jr.....	5,615	Feb. 5, 1878	13	232
Flour.....	Red Wing Mills.....	5,765	Mar. 19, 1878	13	501
Flour.....	Red Wing Mills.....	6,441	Aug. 6, 1878	14	206
Flour.....	Red Wing Mills.....	6,442	Aug. 6, 1878	14	206
Flour.....	G. B. Woodman.....	6,130	May 21, 1878	13	918
Fluid chemical preparation for cleansing silk, &c.....	E. W. Gross & Son.....	5,968	Apr. 30, 1878	13	774
Fluids, Burning.....	J. G. Gorrell.....	5,922	Apr. 23, 1878	13	729
Fly-poison.....	J. C. Allan.....	6,354	July 16, 1878	14	86
Fly-traps, Wire-gauze.....	T. W. Brown.....	6,342	July 9, 1878	14	48
Food for fowls, &c.....	W. H. Bowker & Co.....	5,673	Feb. 26, 1878	13	370
Food for fowls, &c.....	W. H. Bowker & Co.....	5,728	Mar. 12, 1878	13	457
Food for infants and invalids.....	L. C. Sharpless.....	6,203	June 11, 1878	13	1048
Food, Infant's.....	Cereals Manufacturing Company.....	6,780	Nov. 5, 1878	14	680
Freckles, &c., Preparation for removing.....	G. A. Kellogg.....	6,070	May 14, 1878	13	872
Fruit, Dried or evaporated.....	Camp & Blair.....	5,490	Jan. 8, 1878	13	48
Fruit-jars, Covers or caps for.....	Consolidated Fruit Jar Company.....	6,557	Sept. 10, 1878	14	380
Fruits.....	A. Dean.....	6,628	Sept. 24, 1878	14	450
Fruits, Semi-tropical.....	F. Loesser.....	5,495	Jan. 8, 1878	13	48
Furs, such as cloaks, hats, &c., Fancy.....	J. E. Bergtold.....	6,478	Aug. 13, 1878	14	236
G.					
Gas and water registering apparatus.....	American Meter Company.....	5,762	Mar. 19, 1878	13	501
Gas and water registering apparatus.....	American Meter Company.....	5,763	Mar. 19, 1878	13	501

## Alphabetical list of trade-marks—Continued.

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Gas and water registering apparatus	American Meter Company	5,704	Mar. 19, 1878	13	501
Gin	H. Bohlen & Co.	6,228	June 18, 1878	13	1083
Gin	Hoffheimer Brothers	6,729	Oct. 15, 1878	14	562
Ginger tonic	Hiscox & Co.	6,696	Oct. 8, 1878	14	526
Glassware	Corning Glass Works	6,709	Nov. 12, 1878	14	716
Glossing or polishing solution	W. B. Wolf	5,781	Mar. 19, 1878	13	501
Gloves	Fisk, Clark & Flagg	6,215	June 11, 1878	13	1648
Gloves	Fisk, Clark & Flagg	6,216	June 11, 1878	13	1648
Gloves	G. Lisner	5,883	Apr. 16, 1878	13	678
Gloves, Kid	Pings & Pinner	6,019	May 7, 1878	13	819
Gloves, Kid	Pings & Pinner	6,020	May 7, 1878	13	819
Glue	C. A. Clybourn	5,694	Feb. 5, 1878	13	232
Grain, Steamed and dried	W. H. Lewis	6,685	Oct. 8, 1878	14	525
Graphite for stove-polish, &c.	J. Dixon Crucible Company	6,486	Aug. 20, 1878	14	272
Grease and other spots, Preparation for removing	J. W. Cole & Co.	6,578	Sept. 17, 1878	14	416
Grita, Wheaten	J. S. Detwiler & Co.	5,394	Jan. 22, 1878	13	126
Gum resembling India-rubber	Rubberoid Company	6,341	July 9, 1878	14	48
Gum implements	C. D. Leet	6,824	Nov. 5, 1878	14	787
Gunpowder	American Powder Company	6,225	June 11, 1878	13	1648
Gunpowder for sporting purposes	Miami Powder Company	6,094	May 21, 1878	13	917
H.					
Hair, Apparatus for curling	Ehrich & Co.	5,996	May 7, 1878	13	819
Hair-restoratives	J. M. Keyon & Son	5,999	May 7, 1878	13	819
Hair-tonic	W. E. Jervey	6,585	Sept. 17, 1878	14	416
Hair-tonics	W. E. Jervey	6,696	Oct. 1, 1878	14	488
Hammocks	T. Trellian	6,254	June 18, 1878	13	1684
Hams	Troth Brothers	6,095	May 21, 1878	13	917
Hams, shoulders, and bacon	C. Klinck	6,773	Nov. 5, 1878	14	690
Hams, tongues, shoulders, breakfast-bacon, and lard	D. C. List, jr.	6,546	Sept. 3, 1878	14	348
Handkerchiefs, scarfs, book-marks, badges, dress-goods other than dress-trimmings	B. R. Tilt & Son	6,298	June 25, 1878	13	1120
Hardware, Builders'	Russel & Erwin Manufacturing Company	5,866	Apr. 16, 1878	13	677
Harmonicas, Mouth	German Harmonica Company	6,684	Oct. 8, 1878	14	525
Hat-sweats for hats and caps	J. Bigglew	6,709	Oct. 8, 1878	14	526
Hats	W. C. Waring, Belknap & Co.	5,792	Mar. 26, 1878	13	550
Healing compound	B. W. Dyer	6,856	Dec. 3, 1878	14	824
Heaters for warming dwellings, &c.	Gold's Heater Manufacturing Company	6,847	Nov. 26, 1878	14	788
Herring, Smoked	G. T. Peters	6,826	Nov. 26, 1878	14	787
Hogs, Tools and devices used for ringing	H. W. Hill & Co.	6,704	Oct. 8, 1878	14	526
Horsehoe-nails	Ausable Horse Nail Company	5,829	Apr. 9, 1878	13	738
Horsehoe-nails	Putnam Nail Company	5,982	Apr. 30, 1878	13	774
Hose, Hydraulic	Eureka Fire Hose Company	5,591	Jan. 29, 1878	13	190
Hose, Hydraulic	Eureka Fire Hose Company	5,592	Jan. 29, 1878	13	190
Hose, Hydraulic	Eureka Fire Hose Company	5,593	Jan. 29, 1878	13	190
Hosiery and knit goods	Jesson & Hanifen	6,874	Dec. 10, 1878	14	862
I.					
Ice-cream and water-ices	W. L. Darling	6,367	July 16, 1878	14	86
Ink, Burnishing	J. H. Dwyer	6,117	May 21, 1878	13	918
Ink, Burnishing	J. H. Dwyer	6,118	May 21, 1878	13	918
Ink, Burnishing	N. B. Fletcher	6,030	May 7, 1878	13	820
Ink, Marking	Blackwood & Co.	6,498	Aug. 20, 1878	14	272
Ink, Writing	Carter, Dinsmore & Co.	6,192	June 11, 1878	13	1647
Inks	Reynolds & Reynolds	5,563	Jan. 22, 1878	13	126
Insect-destroying powder	G. N. Miles	6,037	May 7, 1878	13	820
Instruments for the treatment of hernia, &c.	I. B. Seeley	5,795	Mar. 26, 1878	13	550
Isinglass	Howe & French	6,054	May 14, 1878	13	871
J.					
Jewelers' tools and files	F. W. Gesswein	6,551	Sept. 3, 1878	14	348
Jewelry	J. T. Mauran	5,980	Apr. 30, 1878	13	774
Jewelry	Steiman Jewelry Company	5,697	Feb. 19, 1878	13	326
Jewelry	Sturdy Brothers & Co.	6,679	Oct. 8, 1878	14	525
Jewelry and silver-plated ware	J. H. Johnston	6,423	July 30, 1878	14	160
Jewelry, Wire and coral	W. C. Greene & Co.	5,690	Feb. 19, 1878	13	326
K.					
Kerosene-wick	Fletcher Manufacturing Company	5,536	Jan. 22, 1878	13	126
L.					
Lace articles and lace edgings	G. Cox	5,918	Apr. 23, 1878	13	729
Lamp-burner	Bridgeport Brass Company	6,526	Sept. 3, 1878	14	348
Lamp-chimneys	Muzzy & Co.	6,345	July 9, 1878	14	48
Lamp-chimneys	Norcross, Mellen & Co.	6,730	Oct. 15, 1878	14	562
Lamp-wickings	Fletcher Manufacturing Company	6,785	Nov. 12, 1878	14	716
Lard	T. R. Jenkins & Son	5,694	Mar. 5, 1878	13	410
Lard	T. R. Jenkins & Son	6,234	July 9, 1878	14	48
Lard	E. G. Pierra	6,440	Aug. 6, 1878	14	266
Lard	W. H. Popham & Co.	6,338	July 9, 1878	14	48
Lard, Hogs'	W. H. Popham	6,262	June 18, 1878	13	1084
Laundry-powder	B. T. Babbitt	5,798	Apr. 2, 1878	13	567
Lead-pencils	E. Faber	5,644	Feb. 12, 1878	13	278
Lead-pencils	E. Faber	5,645	Feb. 12, 1878	13	278
Lead-pencils	E. Faber	5,646	Feb. 12, 1878	13	278
Lead, White	Western White Lead Company	6,571	Sept. 10, 1878	14	380
Lead, White and red	Davis, Chambers & Co.	6,004	May 7, 1878	13	819
Leather	Ordway & Clark	5,864	Apr. 16, 1878	13	677
Leather	R. Woolley & Sons	6,128	May 21, 1878	13	918
Leather-dressing	W. P. Jenney	5,542	Jan. 22, 1878	13	126



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Leather-dressing	L. M. West	5,552	Jan. 22, 1878	13	126
Leather, Tanned	S. Haight	6,848	Nov. 26, 1878	14	788
Lemonade compound	Abrams & Carroll	6,147	May 28, 1878	13	970
Lemonade-powder	J. A. Folger & Co	5,537	Jan. 22, 1878	13	126
Linen collars and cuffs	Huestis & Dusenberry	6,066	May 14, 1878	13	871
Linen goods	O. Jaffé & Pinkus	6,031	May 7, 1878	13	820
Liniment	W. Bickford	5,569	Jan. 29, 1878	13	180
Liniment	Clark & Co	5,847	Apr. 9, 1878	13	638
Liniment	C. E. Davison	5,657	Feb. 19, 1878	13	326
Liniment	D. B. Dewey	6,320	July 9, 1878	14	48
Liniment	W. H. Gregg	5,955	Apr. 30, 1878	13	773
Liniment	L. S. Hodgkins	6,886	Dec. 17, 1878	14	904
Liniment	V. P. D. Townsend	5,551	Jan. 22, 1878	13	126
Liniment	H. S. Woodard	5,529	Jan. 15, 1878	13	11
Liniments	R. Matchett	6,209	June 11, 1878	13	1043
Liniments	J. F. Orbaugh and W. I. Gardner	6,650	Oct. 1, 1878	14	488
Liniments, ointments, and eye-waters	S. C. Buchanan	5,995	May 7, 1878	13	819
Liquid-drier	A. W. Pratt & Co	5,928	Apr. 23, 1878	13	730
Liquid-drier	A. W. Pratt & Co	6,320	July 2, 1878	14	8
Liquors	Rosskam, Gerstley & Co	6,523	Aug. 27, 1878	14	310
Locks and builders' hardware	Mallory, Wheeler & Co	6,266	June 18, 1878	13	1084
Locks and keys	Smith & Ego Manufacturing Company	5,835	Apr. 9, 1878	13	638
Lounges	W. E. Buser	5,874	Apr. 16, 1878	13	678
Lozenges, Bronchial	C. F. Asche	5,898	Apr. 23, 1878	13	729
Lubricating compound	Beatty, Hines & Co	6,300	July 2, 1878	14	7
Lubricating-grease	J. H. Macdonald	6,182	June 4, 1878	13	1012
Lumber	G. Bell & Sons	6,512	Aug. 27, 1878	14	310
Lye and potash	E. Lauferty	6,277	June 25, 1878	13	1130
Lye in packages for domestic use	Excelsior Lye Company	6,863	Dec. 3, 1878	14	824
Lye in packages for domestic use	Excelsior Lye Company	6,864	Dec. 3, 1878	14	824
Lye in packages for domestic use	Excelsior Lye Company	6,865	Dec. 3, 1878	14	824
<b>M.</b>					
Machinery-grease	Union Lubricator Manufacturing Company	5,641	Feb. 12, 1878	13	273
Magnesia, Preparation of	R. Letson	5,543	Jan. 22, 1878	13	126
Malt	Dole Brothers	6,312	July 2, 1878	14	8
Malt-extract	Tarrant & Co	6,722	Oct. 15, 1878	14	562
Marble	Pleasantville Land Company	6,507	Aug. 20, 1878	14	272
Matches	J. Eaton & Son	6,727	Oct. 15, 1878	14	562
Matches and other similar fire and light producers	American Fusee Company	6,876	Dec. 17, 1878	14	903
Matches and other similar fire and light producers	American Fusee Company	6,912	Dec. 17, 1878	14	904
Material for covering roofs, steam-boilers, and pipes, composed wholly or in part of asbestos	H. W. Johns	5,760	Mar. 19, 1878	13	501
Meats, Packed and hermetically-sealed	Saint Louis Beef Canning Company	5,487	Jan. 8, 1878	13	43
Meats, Smoked or cured	D. Crouse & Sons	5,674	Feb. 26, 1878	13	379
Medical compound	J. C. Allen & Co	5,949	Apr. 30, 1878	13	773
Medical compound	Coussens & Tabler	6,635	Oct. 1, 1878	14	487
Medical compound	D. Dick	5,920	Apr. 23, 1878	13	729
Medical compound	Indian Cordial Company	6,712	Oct. 8, 1878	14	526
Medical compound	J. D. McCarthy	5,624	Feb. 5, 1878	13	232
Medical compound	D. D. Perraud	6,714	Oct. 8, 1878	14	526
Medical compound	F. Reinecke	5,825	Apr. 2, 1878	13	598
Medical compound	C. Rowell	6,166	June 4, 1878	13	1012
Medical compound	J. W. Smith	5,496	Jan. 8, 1878	13	43
Medical compound	C. T. Swift	5,888	Apr. 16, 1878	13	678
Medical compound	R. Vlahov	5,656	Feb. 12, 1878	13	278
Medical compound	Woodbury, Weston & Co	5,964	Apr. 30, 1878	13	773
Medical compound for the cure of catarrh and colds	Ely Brothers	6,882	Dec. 17, 1878	14	903
Medical compounds	N. Mercer	6,841	Nov. 26, 1878	14	788
Medical compounds	Partridge Brothers	6,077	May 14, 1878	13	872
Medical preparation	N. S. Driggs and W. S. Lynn	6,005	May 7, 1878	13	819
Medical preparation	A. M. Du Bois	5,571	Jan. 29, 1878	13	180
Medical preparation	E. F. Houghton & Co	5,492	Jan. 8, 1878	13	48
Medical preparation	Household Medicine Company	6,560	Sept. 10, 1878	14	380
Medical preparation	D. Jayne & Son	5,523	Jan. 15, 1878	13	11
Medical preparation	D. Jayne & Son	5,524	Jan. 15, 1878	13	11
Medical preparation	W. L. Keller	5,989	Apr. 23, 1878	13	729
Medical preparation	A. J. Seymour	6,860	Dec. 3, 1878	14	824
Medical preparations	J. Ferré	5,594	Jan. 29, 1878	13	180
Medical preparations	J. Ferré	5,595	Jan. 29, 1878	13	180
Medical preparations	J. Ferré	5,596	Jan. 29, 1878	13	180
Medicated lozenges	Sheley & Roberts	6,743	Oct. 22, 1878	14	602
Medicated salts	Holman Liver Pad Company	5,574	Jan. 29, 1878	13	180
Medicinal articles	E. A. Du Puy	6,059	May 14, 1878	13	871
Medicinal capsules	V. E. Manger	5,662	Feb. 19, 1878	13	326
Medicinal capsules	V. E. Manger	5,663	Feb. 19, 1878	13	326
Medicinal compound	G. W. Appleton	5,801	Apr. 2, 1878	13	548
Medicinal compound	C. R. Burrage	6,257	June 18, 1878	13	1084
Medicinal compound	Cram & Melcher	6,214	June 11, 1878	13	1048
Medicinal compound	R. E. Sellers & Co	5,827	Apr. 2, 1878	13	548
Medicinal compound	T. A. Smutt	5,767	Mar. 19, 1878	13	501
Medicinal preparation	Atkins, Hertel & Co	6,114	May 21, 1878	13	918
Medicinal preparation	T. S. Bradfield	6,115	May 21, 1878	13	918
Medicinal preparation	B. R. Buckwalter	6,753	Oct. 29, 1878	14	636
Medicinal preparation	C. R. Burrage	6,107	May 21, 1878	13	918
Medicinal preparation	Caswell, Hazard & Co	6,097	May 21, 1878	13	917
Medicinal preparation	S. H. Chapin	5,783	Mar. 26, 1878	13	550
Medicinal preparation	A. L. Chum	5,570	Jan. 29, 1878	13	180
Medicinal preparation	J. W. Cole & Co	6,769	Nov. 5, 1878	14	689
Medicinal preparation	Franklin Company	6,496	Aug. 20, 1878	14	272
Medicinal preparation	E. F. Furey	5,659	Feb. 19, 1878	13	326
Medicinal preparation	J. E. Hethering	6,043	May 14, 1878	13	871
Medicinal preparation	J. Heywood	6,274	June 25, 1878	13	1130

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Medicinal preparation.....	E. F. Houghton & Co.....	6,821	Nov. 26, 1878	14	787
Medicinal preparation.....	F. Ingalls.....	6,836	Nov. 26, 1878	14	788
Medicinal preparation.....	D. Jayne & Son.....	5,738	Mar. 12, 1878	13	458
Medicinal preparation.....	D. Jayne & Son.....	5,739	Mar. 12, 1878	13	458
Medicinal preparation.....	D. Jayne & Son.....	5,740	Mar. 12, 1878	13	458
Medicinal preparation.....	D. Jayne & Son.....	5,741	Mar. 12, 1878	13	458
Medicinal preparation.....	D. Jayne & Son.....	5,742	Mar. 12, 1878	13	458
Medicinal preparation.....	D. Jayne & Son.....	5,743	Mar. 12, 1878	13	458
Medicinal preparation.....	J. F. Kendall.....	6,840	Nov. 26, 1878	14	788
Medicinal preparation.....	J. C. Kerr.....	6,494	Aug. 20, 1878	14	272
Medicinal preparation.....	E. C. Luke.....	5,786	Mar. 26, 1878	13	550
Medicinal preparation.....	D. Marshall.....	6,073	May 14, 1878	13	872
Medicinal preparation.....	A. E. Mintie.....	6,579	Sept. 17, 1878	14	416
Medicinal preparation.....	A. E. Mintie.....	6,587	Sept. 17, 1878	14	416
Medicinal preparation.....	F. L. Newfield.....	6,361	July 16, 1878	14	86
Medicinal preparation.....	W. M. Olliffe.....	5,787	Mar. 26, 1878	13	550
Medicinal preparation.....	F. M. Pease.....	6,825	Nov. 26, 1878	14	787
Medicinal preparation.....	W. T. Peck.....	5,748	Mar. 12, 1878	13	458
Medicinal preparation.....	J. Person.....	6,495	Aug. 20, 1878	14	272
Medicinal preparation.....	H. H. de Potferron.....	6,068	May 21, 1878	13	917
Medicinal preparation.....	Relief Manufacturing Company.....	6,103	May 21, 1878	13	917
Medicinal preparation.....	J. C. Richardson.....	5,687	Feb. 26, 1878	13	370
Medicinal preparation.....	S. A. Richmond.....	5,788	Mar. 26, 1878	13	550
Medicinal preparation.....	W. T. Russell.....	6,211	June 11, 1878	13	1047
Medicinal preparation.....	C. W. Scott.....	5,935	Apr. 23, 1878	13	730
Medicinal preparation.....	R. E. Sellers & Co.....	6,383	July 16, 1878	14	86
Medicinal preparation.....	D. Smith.....	6,035	May 7, 1878	13	820
Medicinal preparation.....	Townsend, Wilson & Co.....	5,992	Apr. 30, 1878	13	774
Medicinal preparation.....	T. E. Van Dyke.....	5,993	Apr. 30, 1878	13	774
Medicinal preparation.....	W. R. Warner & Co.....	5,724	Mar. 12, 1878	13	457
Medicinal preparation.....	G. S. Weaver.....	6,374	July 16, 1878	14	86
Medicinal preparation.....	Weeks & Potter.....	5,894	Apr. 30, 1878	13	774
Medicinal preparation, Fluid.....	Vogeler, Meyer & Co.....	5,972	Apr. 30, 1878	13	774
Medicinal preparation for the cure of coughs, colds, &c.....	Howard Brothers.....	6,358	July 23, 1878	14	120
Medicinal preparation for the cure of headache.....	C. De Cordova.....	6,246	June 18, 1878	13	1084
Medicinal preparation for the cure of liver-complaint, &c.....	W. Condell.....	6,580	Sept. 17, 1878	14	416
Medicinal preparation for the cure of neuralgia, &c.....	M. C. White.....	6,081	May 14, 1878	13	872
Medicinal preparation known as "Corraasa compound".....	Allison & Hearn.....	5,974	Apr. 30, 1878	13	774
Medicinal preparations.....	Brown Medicine and Manufacturing Company.....	5,690	Mar. 5, 1878	13	410
Medicinal preparations.....	W. M. Caterson.....	6,669	Oct. 8, 1878	14	525
Medicinal preparations.....	J. M. Falk.....	6,196	June 11, 1878	13	1047
Medicinal preparations.....	V. E. Mauger.....	6,531	Sept. 8, 1878	14	348
Medicinal preparations.....	M. E. Mead.....	6,681	Oct. 8, 1878	14	525
Medicinal preparations.....	M. Palen.....	6,654	Oct. 1, 1878	14	488
Medicinal preparations.....	E. D. Pape.....	6,662	Oct. 1, 1878	14	488
Medicinal preparations.....	Pond's Extract Company.....	6,813	Nov. 19, 1878	14	750
Medicinal preparations.....	T. H. Videto.....	6,443	Aug. 6, 1878	14	206
Medicinal preparations.....	Vought & Killgore.....	5,696	Mar. 5, 1878	13	410
Medicinal preparations.....	J. L. Wallack.....	6,444	Aug. 6, 1878	14	206
Medicinal preparations.....	C. White.....	6,659	Oct. 1, 1878	14	488
Medicinal preparations.....	W. H. Whitney.....	6,106	May 31, 1878	13	918
Medicinal preparations.....	J. H. Zellin & Co.....	5,965	Apr. 30, 1878	13	773
Medicinal preparations, Certain.....	T. Carter.....	6,398	July 23, 1878	14	120
Medicinal preparations of witch-hazel.....	F. Humphreys.....	5,925	Apr. 23, 1878	13	730
Medicinal preparations, Solid and fluid.....	Vogeler, Meyer & Co.....	5,971	Apr. 30, 1878	13	774
Medicinal purposes, Essence of petroleum for.....	Weeks & Potter.....	5,836	Apr. 9, 1878	13	638
Medicinal tonic.....	R. Van Buskirk.....	6,113	May 21, 1878	13	918
Medicine.....	W. R. Merwin.....	5,528	Jan. 15, 1878	13	11
Medicine.....	R. S. Powell and J. J. Turner.....	5,902	Apr. 23, 1878	13	729
Medicine for chills.....	E. W. Grove.....	5,773	Mar. 19, 1878	13	501
Medicine for horses.....	E. W. Haines.....	5,518	Jan. 15, 1878	13	11
Medicine for horses, cattle, &c.....	J. Saunders.....	6,480	Aug. 13, 1878	14	236
Medicine for horses, cattle, and poultry.....	F. A. Miller.....	5,654	Feb. 12, 1878	13	278
Medicine for the cure of ague and fever.....	A. W. and E. C. Beach.....	6,555	Sept. 10, 1878	14	380
Medicine for the cure of catarrh.....	Thompson & Dale.....	5,478	Jan. 1, 1878	13	8
Medicine for the cure of dropsy and the like diseases.....	W. E. Clarke.....	6,575	Sept. 17, 1878	14	416
Medicines.....	Clin & Co.....	6,085	May 14, 1878	13	872
Medicines.....	G. G. Kennedy.....	6,069	May 14, 1878	13	872
Medicines.....	B. F. Rackley.....	6,467	Aug. 13, 1878	14	236
Medicines.....	W. R. Warner & Co.....	5,625	Feb. 5, 1878	13	232
Medicines for the relief of catarrh, &c.....	R. B. Huntzelman and C. B. Coe.....	5,831	Apr. 9, 1878	13	638
Medicines, Proprietary.....	H. C. Stewart.....	6,589	Sept. 17, 1878	14	416
Medicines, Veterinary.....	E. S. Smith.....	6,210	June 11, 1878	13	1048
Metal for anti-friction purposes.....	G. K. Tryon, Son & Co.....	5,688	Feb. 26, 1878	13	370
Metals, Anti-friction.....	T. Thurber.....	6,223	June 11, 1878	13	1048
Milk.....	W. O. Wheeler.....	5,725	Mar. 12, 1878	13	457
Milking device, Cow.....	W. Crozier.....	6,418	July 30, 1878	14	100
Millinery goods.....	Lord & Taylor.....	6,071	May 14, 1878	13	872
Minced fish.....	W. W. Treat.....	5,588	Jan. 29, 1878	13	160
Mineral product utilized in the manufacture of paper and otherwise.....	Agalite Fiber Company.....	5,983	Apr. 30, 1878	13	774
Mineral water.....	Apollinaris Company.....	6,566	Sept. 10, 1878	14	380
Mineral water.....	Apollinaris Company.....	6,732	Oct. 22, 1878	14	602
Mineral water.....	A. A. Colby.....	5,482	Jan. 8, 1878	13	48
Mineral water.....	T. F. Goode.....	5,878	Apr. 16, 1878	13	678
Mineral water, seltzer, soda water, and the like liquids.....	G. L. S. Kimberly.....	6,316	July 2, 1878	14	8
Mineral waters.....	J. A. Lomax.....	6,109	June 11, 1878	13	1047
Mineral waters.....	C. D. Swain & Co.....	5,818	Apr. 3, 1878	13	596
Mouth or tooth wash and tooth-powder.....	C. D. S. Fruh.....	5,840	Apr. 9, 1878	13	638
Mucilage.....	Carter, Dinamore & Co.....	6,108	June 11, 1878	13	1047
Mucilage.....	Carter, Dinamore & Co.....	6,194	June 11, 1878	13	1047
Musical toys.....	J. F. Phillips.....	5,549	Jan. 23, 1878	13	126
Mustard.....	J. H. Brand & Co.....	6,231	June 18, 1878	13	1083
Mustard.....	Burns & Byram.....	6,499	Aug. 20, 1878	14	272

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Mustard .....	W. G. Dean .....	5, 784	Mar. 26, 1878	13	550
Mustard .....	Sherman Brothers & Co .....	6, 595	Sept. 17, 1878	14	416
Mustard and spices .....	H. B. Sherman .....	6, 720	Oct. 15, 1878	14	562
Mustard and spices .....	H. B. Sherman .....	6, 721	Oct. 15, 1878	14	563
Mustard, Flour of .....	J. H. Brand & Co .....	6, 397	July 23, 1878	14	120
Mustard, spices, and roasted coffee .....	W. J. Fell .....	6, 091	May 21, 1878	13	917
Mustard, spices, and roasted coffee .....	W. J. Fell .....	6, 092	May 21, 1878	13	917
N.					
Needle, Sewing and knitting .....	H. Baylis .....	6, 474	Aug. 13, 1878	14	236
Needles .....	National Needle Company .....	6, 222	June 11, 1878	13	1048
Needles .....	R. J. Roberts .....	6, 047	May 14, 1878	13	871
Needles .....	R. J. Roberts .....	6, 048	May 14, 1878	13	871
Needles .....	J. Thornton & Co .....	6, 105	May 21, 1878	13	918
Newspaper periodical .....	American Plumbers' Publishing Company .....	5, 642	Feb. 12, 1878	13	278
Newspapers .....	J. H. Taggart & Son .....	5, 752	Mar. 12, 1878	13	458
Nozzles, Hose .....	E. R. Preston .....	5, 960	Apr. 30, 1878	13	773
O.					
Oil, Beef .....	H. Berthold .....	6, 190	June 11, 1878	13	1047
Oil, Coal .....	M. Ehrman & Co .....	6, 195	June 11, 1878	13	1047
Oil, Coal .....	J. E. Miles .....	6, 267	June 18, 1878	13	1084
Oil, Cod-liver .....	Ansard, Harford & Co .....	6, 502	Sept. 17, 1878	14	416
Oil, Cod-liver .....	Ansard, Harford & Co .....	6, 593	Sept. 17, 1878	14	416
Oil, Cod-liver .....	G. I. McKelway .....	6, 800	Nov. 12, 1878	14	716
Oil, Cod-liver .....	W. H. Schieffelin & Co .....	6, 349	July 9, 1878	14	48
Oil, Lubricating .....	T. Brown .....	5, 951	Apr. 30, 1878	13	773
Oil or compound, Lubricating .....	G. Binns, jr .....	6, 104	May 21, 1878	13	917
Oil-well supplies .....	Gillespie Brothers & Co .....	5, 485	Jan. 8, 1878	13	48
Oils, Essential .....	J. J. Quetting .....	5, 865	Apr. 16, 1878	13	677
Oils, Illuminating .....	Wadsworth, Martinez & Longman .....	6, 163	May 28, 1878	13	970
Oils, Illuminating .....	Yates & Co .....	6, 664	Oct. 1, 1878	14	483
Oils, Illuminating .....	Yates & Co .....	6, 665	Oct. 1, 1878	44	488
Oils, Illuminating and lubricating .....	Standard Oil Company .....	6, 281	June 25, 1878	13	1130
Oils, Lubricating .....	J. W. Bartlett .....	6, 716	Oct. 8, 1878	14	526
Oils, Lubricating .....	T. Brown .....	6, 056	May 14, 1878	13	871
Oils, Lubricating .....	A. Stevens .....	6, 426	July 30, 1878	14	160
Oils, Lubricating and illuminating .....	W. L. Elkins .....	6, 060	May 14, 1878	13	871
Oils, Lubricating and illuminating .....	W. L. Elkins .....	6, 061	May 14, 1878	13	871
Oils, Lubricating and illuminating .....	W. L. Elkins .....	6, 063	May 14, 1878	13	871
Oilers for lubricating machinery .....	Consolidated Fruit Jar Company .....	6, 556	Sept. 10, 1878	14	389
Ointment .....	Soler & Guardias .....	6, 290	June 25, 1878	13	1130
Ointment, Pile .....	Cousens & Tabler .....	5, 848	Apr. 9, 1878	13	638
Ointment, Pile .....	G. W. Frazier .....	6, 149	May 28, 1878	13	970
Ointment, Pile .....	Upton & Co .....	6, 243	June 18, 1878	13	1083
Oranges .....	F. De Barry .....	5, 509	Jan. 15, 1878	13	11
Organ mechanism or action .....	E. P. Carpenter .....	5, 860	Apr. 16, 1878	13	677
Organs, Cabinet or reed .....	Peloubet, Pelton & Co .....	5, 706	Mar. 5, 1878	13	410
Organs, Reed .....	Burdett Organ Company (limited) .....	5, 513	Jan. 15, 1878	13	11
Overalls, jumpers, and garments of outside wear .....	B. Greenbaum .....	6, 138	May 28, 1878	13	970
Overalls, jumpers and ready-made goods for outside wear .....	W. G. Badger .....	6, 627	Sept. 24, 1878	14	450
P.					
Paint .....	A. M. Fletcher and J. McCoy .....	6, 559	Sept. 10, 1878	14	380
Paint, Elastic iron .....	A. O. Brummel .....	6, 590	Sept. 17, 1878	14	416
Paint on the bottom of vessels, Material used as .....	N. Seeley .....	6, 171	June 4, 1878	13	1012
Paints .....	Iron Clad Paint Company .....	5, 479	Jan. 1, 1878	12	8
Paints and colors .....	A. Levesque .....	6, 521	Aug. 27, 1878	14	310
Paints and colors .....	R. E. Nichols .....	6, 319	July 2, 1878	14	8
Paints and colors, in oil, Mixed .....	T. Ramsay .....	6, 362	July 16, 1878	14	86
Paints, Bronze .....	J. Marsching & Co .....	6, 781	Nov. 5, 1878	14	680
Paints, Liquid .....	G. W. Pitkin & Co .....	6, 151	May 28, 1878	13	970
Paints, Mineral and metallic .....	L. B. Stone .....	5, 889	Apr. 16, 1878	13	678
Paints, Mixed .....	Gutta Percha Paint Company .....	5, 892	Apr. 2, 1878	13	668
Paints, Mixed .....	Yates & Co .....	6, 812	Nov. 19, 1878	14	750
Paints, Ready-mixed .....	Norton & Wieder .....	5, 871	Apr. 16, 1878	13	678
Paper .....	Crane Brothers .....	5, 919	Apr. 23, 1878	13	729
Paper .....	S. B. Massa .....	6, 675	Oct. 8, 1878	14	525
Paper and books, Copying .....	W. Mann .....	6, 159	May 28, 1878	13	970
Paper bag .....	Smith, Dixon & Co .....	6, 392	July 23, 1878	14	120
Paper bags .....	Smith, Dixon & Co .....	5, 897	Apr. 23, 1878	13	729
Paper carpets and paper oil-cloths .....	T. S. Scott & Brother .....	5, 904	Apr. 23, 1878	13	729
Paper collars and cuffs .....	H. A. Mann, jr .....	6, 506	Aug. 20, 1878	14	272
Paper-cutting machine .....	R. L. Howard .....	6, 198	June 11, 1878	13	1047
Paper-cutting machine .....	G. H. Sanborn .....	6, 239	June 18, 1878	13	1083
Paper-cutting machine .....	Standard Machinery Company .....	6, 352	July 9, 1878	14	48
Paper-cutting machine .....	Standard Machinery Company .....	6, 394	July 23, 1878	14	120
Paper-cutting machine .....	Standard Machinery Company .....	6, 610	Sept. 24, 1878	14	450
Paper, Drawing .....	Keuffel & Esser .....	6, 794	Nov. 12, 1878	14	716
Paper, Grocers' wrapping .....	T. D. Hubbard .....	6, 389	July 23, 1878	14	120
Paper, Writing .....	Blanchet Frères & Kléber .....	6, 789	Nov. 12, 1878	14	716
Paper, Writing .....	Blanchet Frères & Kléber .....	6, 835	Nov. 26, 1878	14	788
Paper, Writing .....	Cunningham, Curtiss & Welch .....	6, 771	Nov. 5, 1878	14	680
Paper, Writing .....	B. Weston .....	5, 868	Apr. 16, 1878	13	677
Paste, Italian .....	H. K. & F. B. Thurber & Co .....	5, 907	Apr. 23, 1878	13	729
Paste or mucilage, Compound .....	B. F. Callender .....	6, 293	June 25, 1878	13	1130
Peanuts .....	K. B. Elliott .....	6, 621	Sept. 24, 1878	14	450
Peanuts .....	K. B. Elliott .....	6, 683	Oct. 8, 1878	14	525
Pen, Metallic .....	F. Soennecken .....	6, 323	July 2, 1878	14	8
Pens .....	Esterbrook Steel Pen Manufacturing Company .....	6, 598	Dec. 17, 1878	14	904

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Pens .....	Esterbrook Steel Pen Manufacturing Company.	6,899	Dec. 17, 1878	14	904
Pens .....	Esterbrook Steel Pen Manufacturing Company.	6,900	Dec. 17, 1878	14	904
Pens .....	Esterbrook Steel Pen Manufacturing Company.	6,901	Dec. 17, 1878	14	904
Pens .....	Esterbrook Steel Pen Manufacturing Company.	6,902	Dec. 17, 1878	14	904
Pens .....	Esterbrook Steel Pen Manufacturing Company.	6,903	Dec. 17, 1878	14	904
Pens .....	Esterbrook Steel Pen Manufacturing Company.	6,904	Dec. 17, 1878	14	904
Pens .....	Esterbrook Steel Pen Manufacturing Company.	6,905	Dec. 17, 1878	14	904
Pens .....	Esterbrook Steel Pen Manufacturing Company.	6,906	Dec. 17, 1878	14	904
Pens .....	Esterbrook Steel Pen Manufacturing Company.	6,907	Dec. 17, 1878	14	904
Pens .....	Esterbrook Steel Pen Manufacturing Company.	6,908	Dec. 17, 1878	14	904
Pens .....	Esterbrook Steel Pen Manufacturing Company.	6,909	Dec. 17, 1878	14	904
Pens .....	Esterbrook Steel Pen Manufacturing Company.	6,910	Dec. 17, 1878	14	904
Pens .....	Esterbrook Steel Pen Manufacturing Company.	6,911	Dec. 17, 1878	14	904
Pens .....	Esterbrook Steel Pen Manufacturing Company.	6,917	Dec. 17, 1878	14	904
Pens .....	N. H. Spaulding.	6,078	May 14, 1878	13	872
Pens, pencils, and pen-holders .....	J. D. von Crucible Company.	5,655	Feb. 12, 1878	13	278
Pens, Steel .....	L. Dreka.	6,741	Oct. 22, 1878	14	901
Pens, Steel .....	J. Gillott & Sons.	5,731	Mar. 12, 1878	13	457
Pens, Steel .....	J. Gillott & Sons.	5,732	Mar. 12, 1878	13	457
Pens, Steel .....	J. Gillott & Sons.	5,733	Mar. 12, 1878	13	457
Pens, Steel .....	J. Gillott & Sons.	5,734	Mar. 12, 1878	13	457
Pens, Steel .....	J. Gillott & Sons.	6,176	June 4, 1878	13	1012
Pens, Steel .....	J. Gillott & Sons.	6,177	June 4, 1878	13	1012
Pens, Steel .....	J. Gillott & Sons.	6,178	June 4, 1878	13	1012
Pens, Steel .....	J. Gillott & Sons.	6,179	June 4, 1878	13	1012
Pens, Steel .....	J. Gillott & Sons.	6,180	June 4, 1878	13	1012
Pens, Steel .....	J. Gillott & Sons.	6,181	June 4, 1878	13	1012
Pencils, Lead .....	Eagle Pencil Company.	5,606	Feb. 5, 1878	13	252
Pencils, Lead .....	Eagle Pencil Company.	5,850	Apr. 9, 1878	13	628
Pepsin, a remedy for dyspepsia, Granulated .....	D. S. Orton.	6,000	May 7, 1878	13	819
Perfumery .....	A. Bell.	6,877	Dec. 17, 1878	14	908
Perfumery .....	J. T. Lannan.	6,719	Oct. 15, 1878	14	562
Perfumery .....	H. B. Slaven.	6,787	Nov. 12, 1878	14	716
Perfumery .....	Young, Ladd & Coffin.	6,353	July 9, 1878	14	48
Perfumery and other toilet preparations .....	J. T. Saunders.	6,687	Oct. 8, 1878	14	535
Perfumes .....	C. Lubrecht.	6,611	Sept. 24, 1878	14	450
Perfumes for the breath .....	W. M. Fleming.	6,295	June 25, 1878	13	1130
Petroleum, Emollient and remedial preparation of .....	Chesbrough Manufacturing Company.	6,041	May 14, 1878	13	871
Petroleum for illuminating purposes, Refined .....	W. H. Crossman & Brother.	6,320	July 9, 1878	14	48
Petroleum for toilet purposes, Product of .....	Binghamton Oil Refining Company.	5,510	Jan. 15, 1878	13	11
Petroleum, Refined .....	Bowling & Archibald.	6,511	Aug. 27, 1878	14	310
Petroleum, Refined .....	W. H. Crossman & Brother.	6,328	July 9, 1878	14	47
Petroleum, Refined .....	J. W. Hummewell & Co.	5,541	Jan. 22, 1878	13	126
Petroleum, Refined .....	H. W. Peabody & Co.	6,183	June 4, 1878	13	1012
Pharmaceutical preparations .....	H. A. Cassebeer, jr.	6,205	June 11, 1878	13	1048
Phosphorus and amorphous phosphorus .....	Albright & Wilson.	6,682	Oct. 8, 1878	14	525
Photographic material .....	E. & H. T. Anthony & Co.	6,472	Aug. 13, 1878	14	236
Photographic materials and appliances .....	E. & H. T. Anthony & Co.	5,600	Feb. 5, 1878	13	232
Photographs and photolithographs .....	Artotype Company.	6,733	Oct. 22, 1878	14	603
Piano-fortes .....	A. Weber.	6,599	Sept. 17, 1878	14	416
Piano-fortes and organs .....	F. G. Smith.	5,777	Mar. 19, 1878	13	501
Piano-fortes and parts thereof .....	Steinway & Sons.	6,340	July 9, 1878	14	48
Pianos .....	Haines Brothers.	5,620	Feb. 5, 1878	13	232
Pickles .....	Yarnall Brothers.	6,702	Oct. 8, 1878	14	526
Pile-cure .....	S. J. Cox & Co.	5,908	Apr. 23, 1878	13	729
Pile-drops .....	W. Rockwell & Co.	6,699	Oct. 8, 1878	14	526
Piles, Remedy for .....	J. E. Butler.	6,025	May 7, 1878	13	820
Pills .....	E. E. Barnum.	5,873	Apr. 16, 1878	12	678
Pills, Anti-bilious root and plant .....	G. G. Steckee.	5,566	Jan. 22, 1878	13	126
Pills, Cathartic .....	H. D. Whitbeck & Co.	6,167	June 4, 1878	12	1022
Pills or troches .....	H. A. Tilden.	6,534	Sept. 3, 1878	14	348
Pins .....	Judson & Fontaine Pin Works.	6,540	Sept. 3, 1878	14	348
Pins .....	Judson & Fontaine Pin Works.	6,541	Sept. 3, 1878	14	348
Pins .....	Judson & Fontaine Pin Works.	6,542	Sept. 3, 1878	14	348
Pistols and guns .....	Graham & Haines.	6,850	Dec. 3, 1878	14	824
Plaiters .....	F. Calvert.	5,533	Jan. 22, 1878	13	126
Plasters for medicinal purposes, Perforated .....	Holman Liver Pad Company.	6,140	May 28, 1878	13	970
Plastic composition .....	Bonsilite Company (limited).	6,509	Aug. 20, 1878	14	272
Plow, Cast-iron .....	B. F. Avery & Sons.	6,817	Nov. 26, 1878	14	787
Plow, Steel .....	B. F. Avery & Sons.	6,818	Nov. 26, 1878	14	787
Plows .....	H. C. Shaw Plow Company.	5,710	Mar. 5, 1878	13	410
Polish for metals and glass .....	J. P. Haines.	5,648	Feb. 12, 1878	13	278
Pork, Salted, pickled, and cured or smoked .....	J. Rawson & Sons.	5,749	Mar. 12, 1878	13	428
Porter, Flavor for .....	D. D. Williamson.	6,745	Oct. 22, 1878	14	462
Potash .....	Weikel & Smith Spice Company.	6,052	May 14, 1878	13	871
Potash and soda .....	Greenbank Alkali Company.	6,806	Nov. 10, 1878	14	770
Potatoes, Fried .....	G. F. Sleeper.	6,351	July 9, 1878	14	48
Preserving substances, Fruit .....	L. P. Worrall.	6,459	Aug. 13, 1878	14	256
Printed publications .....	Donaldson Brothers.	6,610	Sept. 24, 1878	14	470
Printed publications .....	Keppler & Schwarzmunn.	6,501	Aug. 20, 1878	14	272
Printed publications .....	C. H. Read.	5,817	Apr. 2, 1878	13	538

*Alphabetical list of trade-marks—Continued.*

For what purpose.	Name of patentee.	No.	Date.	Official Gazette.	
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Printers' galleys .....	B. F. Cole & Co .....	6,001	May 7, 1878	13	819
Printers' inking-rollers, Composition for .....	A. Van Bibber .....	6,079	May 14, 1878	13	872
Printing-plates .....	L. Brown & Co .....	6,453	Aug. 13, 1878	14	236
Printing-press .....	F. M. Weiler .....	6,608	Sept. 24, 1878	14	450
Printing-presses .....	J. W. Daughaday & Co .....	5,839	Apr. 9, 1878	13	638
Prints .....	Eddystone Manufacturing Company .....	6,457	Aug. 13, 1878	14	236
Prints .....	Eddystone Manufacturing Company .....	6,458	Aug. 13, 1878	14	236
Pump, Steam .....	Pulsometer Steam Pump Company .....	6,605	Sept. 24, 1878	14	450
<b>R.</b>					
Rags and paper-stock .....	Lee & Sturges .....	6,009	May 7, 1878	13	819
Railway supplies .....	Nottingham Manufacturing Company .....	5,682	Feb. 26, 1878	13	370
Rakes, Hay .....	A. W. Miner & Co .....	6,251	June 18, 1878	13	1084
Rakes, Horse hay .....	B. C. Taylor .....	5,810	Apr. 2, 1878	13	598
Razors .....	G. F. Croutzburg .....	6,386	July 23, 1878	14	120
Razors .....	H. Sears & Co .....	6,894	Dec. 17, 1878	14	904
Reaping and mowing machine .....	Adrianse, Platt & Co .....	5,480	Jan. 8, 1878	13	48
Refrigerators .....	Smith Refrigerator and Manufacturing Company .....	5,826	Apr. 2, 1878	13	598
Rheumatism and gout, Remedies for .....	J. Verliac .....	6,612	Sept. 24, 1878	14	450
Ribbons .....	Meyer & Dickinson .....	5,863	Apr. 16, 1878	13	677
Ribbons .....	Oberteuffer, Abegg & Co .....	6,833	Nov. 26, 1878	14	788
Ribbons, Gros-grain .....	W. P. Gill .....	5,754	Mar. 19, 1878	13	501
Ribbons, Silk .....	C. A. Auffm'ordt & Co .....	6,164	June 4, 1878	13	1012
Ribbons, trimmings, &c .....	J. Silbermann & Co .....	6,570	Sept. 10, 1878	14	380
Rivets and burs .....	Blake & Johnson .....	5,463	Jan. 1, 1878	13	8
Roofing cement and felt .....	Warren, Lober & Co .....	5,501	Jan. 8, 1878	13	48
Roofing, Slate .....	H. G. Hughes .....	6,233	June 18, 1878	13	1083
Rubber goods .....	Hodgman & Co .....	5,804	Apr. 2, 1878	13	598
Rubber goods, Fine .....	Davidson Rubber Company .....	6,422	July 30, 1878	14	160
Ruffling .....	D. Miller & Co .....	5,632	Feb. 12, 1878	13	278
<b>S.</b>					
Saleratus .....	Church & Co .....	5,629	Feb. 12, 1878	13	277
Saleratus and bicarbonate of soda .....	Church & Co .....	6,558	Sept. 10, 1878	14	380
Saleratus and soda .....	Church & Co .....	5,628	Feb. 12, 1878	13	277
Saleratus, bicarbonate of soda, supercarbonate of soda, and sal-soda .....	H. A. DeLand & Co .....	6,137	May 28, 1878	13	970
Saleratus, soda, borax, and concentrated lye .....	Weikel & Smith Spice Company .....	6,292	June 25, 1878	13	1130
Salt .....	A. Deakin .....	6,740	Oct. 22, 1878	14	602
Salt .....	R. Evans .....	6,479	Aug. 13, 1878	14	236
Salt .....	R. Evans .....	6,492	Aug. 20, 1878	14	272
Salt .....	R. N. Gere .....	6,016	May 7, 1878	13	819
Salt .....	H. K. & F. B. Thurber & Co .....	5,872	Apr. 16, 1878	13	678
Salt .....	H. K. & F. B. Thurber & Co .....	6,607	Sept. 24, 1878	14	450
Salve .....	A. Ahl .....	6,834	Nov. 26, 1878	14	788
Salve .....	Redding & Co .....	6,539	Sept. 3, 1878	14	348
Salve .....	Schloss & Frech .....	6,436	Aug. 13, 1878	14	236
Salve .....	L. E. Shipman .....	6,700	Oct. 8, 1878	14	526
Sarsaparilla extracts .....	R. F. George .....	6,120	May 21, 1878	13	918
Saws .....	Wheeler, Madden & Clemson Manufacturing Company .....	6,777	Nov. 5, 1878	14	680
Saws and files .....	Emerson, Smith & Co .....	5,876	Apr. 16, 1878	13	678
Saws and saw attachments .....	C. Richardson .....	5,981	Apr. 30, 1878	13	774
Scales, Weighing .....	E. & T. Fairbanks & Co .....	6,131	May 28, 1878	13	969
Scales, Weighing .....	E. & T. Fairbanks & Co .....	6,636	Oct. 1, 1878	14	487
Scrap-books .....	Slote, Woodman & Co .....	5,896	Apr. 23, 1878	13	729
Screw-caps for fruit-jars, &c .....	Consolidated Fruit Jar Company .....	5,947	Apr. 23, 1878	13	730
Sea-sickness, Remedy for .....	R. R. Kent .....	6,390	July 23, 1878	14	120
Sewing-machine needle .....	R. M. Wanzer & Co .....	6,761	Oct. 29, 1878	14	636
Sewing-machines .....	Providence Tool Company .....	5,895	Apr. 23, 1878	13	729
Sewing-machines .....	Tryber & Sweetland .....	6,433	July 30, 1878	14	160
Sheetings and shirtings, Cotton .....	B. B. & R. Knight .....	6,786	Nov. 12, 1878	14	716
Shingles, Sawed pine .....	J. R. Hall .....	6,822	Nov. 26, 1878	14	787
Shirts .....	C. L. Smith .....	5,903	Apr. 23, 1878	13	729
Shirts .....	Stark & Loewenthal .....	6,893	Dec. 17, 1878	14	904
Shirts .....	H. Wallach's Sons .....	6,083	May 14, 1878	13	872
Shirts .....	Wheeler & Alling .....	6,204	June 11, 1878	13	1048
Shirts, Gentlemen's .....	C. H. Buck .....	5,917	Apr. 23, 1878	13	729
Shirts, overalls, and underwear .....	J. Miller & Son .....	6,013	May 7, 1878	13	819
Shoe .....	Kenny & McPartland .....	6,843	Nov. 26, 1878	14	788
Shoes .....	C. Libby .....	5,473	Jan. 1, 1878	13	8
Shovels and scoops .....	E. Linley .....	6,484	Aug. 20, 1878	14	272
Silicate erasable surface material for memorandum-books, &c .....	A. H. Jocelyn .....	5,998	May 7, 1878	13	819
Sirups .....	Veiller, Jayne & Co .....	5,619	Feb. 5, 1878	13	232
Skirts and corsets .....	Detroit Shirt and Corset Company .....	6,855	Dec. 3, 1878	14	824
Snuff .....	C. De Rojer .....	6,253	June 18, 1878	13	1084
Snuff .....	B. F. Weyman .....	5,726	Mar. 12, 1878	13	457
Snuff .....	B. F. Weyman .....	6,146	May 28, 1878	13	970
Snuff .....	B. F. Weyman .....	6,153	May 28, 1878	13	970
Snuff, chewing and smoking tobacco, cigars, and cigarettes .....	G. W. Gail & Ax .....	6,642	Oct. 1, 1878	14	487
Snuff, cigars, cigarettes, and chewing and smoking tobacco .....	G. W. Gail & Ax .....	6,649	Oct. 1, 1878	14	488
Soap .....	B. T. Babbitt .....	5,857	Apr. 16, 1878	13	677
Soap .....	B. T. Babbitt .....	6,226	June 18, 1878	13	1083
Soap .....	C. F. Bates .....	6,462	Aug. 13, 1878	14	236
Soap .....	D. S. Brown & Co .....	6,396	July 23, 1878	14	120
Soap .....	D. S. Brown & Co .....	6,549	Sept. 3, 1878	14	348
Soap .....	D. S. Brown & Co .....	6,550	Sept. 3, 1878	14	348
Soap .....	D. S. Brown & Co .....	6,798	Nov. 12, 1878	14	716
Soap .....	Curtis, Davis & Co .....	5,489	Jan. 8, 1878	13	48
Soap .....	Day & Frick .....	6,463	Aug. 13, 1878	14	236
Soap .....	Day & Frick .....	6,491	Aug. 20, 1878	14	272
Soap .....	W. Dreydoppel .....	5,717	Mar. 12, 1878	13	457
Soap .....	J. Eavenson & Sons .....	6,207	June 11, 1878	13	1048



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For what purpose.	Name of patentee.	No.	Date.	Official Gazette.	
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Soap	Ecker & Co.	6,160	May 28, 1878	13	970
Soap	J. S. & T. Elkinton.	6,029	May 7, 1878	13	820
Soap	Fairchild & Shelton.	5,460	Jan. 1, 1878	13	8
Soap	Goetzmann & Son.	6,314	July 2, 1878	14	8
Soap	J. S. Kirk & Co.	5,086	Apr. 30, 1878	13	774
Soap	J. S. Kirk & Co.	5,087	Apr. 30, 1878	13	774
Soap	J. S. Kirk & Co.	5,988	Apr. 30, 1878	13	774
Soap	Lantz & Brothers & Co.	6,425	July 30, 1878	14	160
Soap	C. McKee, Son & Co.	6,200	June 11, 1878	13	1047
Soap	A. Melzer & Co.	6,547	Jan. 22, 1878	13	126
Soap	W. Mulchahey.	6,359	July 16, 1878	14	86
Soap	Proctor & Gamble.	5,616	Feb. 5, 1878	13	222
Soap	Proctor & Gamble.	6,850	Nov. 26, 1878	14	788
Soap	H. V. Raymond.	5,066	Feb. 19, 1878	13	326
Soap	F. Treunkamp.	6,751	Oct. 22, 1878	14	602
Soap and candles.	Proctor & Gamble.	6,291	June 25, 1878	13	1130
Soap, Borax.	P. W. Hirst.	6,885	Dec. 17, 1878	14	903
Soap, candles, and borax.	J. I. Keco.	5,744	Mar. 12, 1878	13	458
Soap, Harness.	W. Greene.	6,537	Sept. 3, 1878	14	348
Soap, Shaving.	C. Pauly.	6,738	Oct. 22, 1878	14	602
Soap, Toilet.	S. Palmer.	6,004	Sept. 24, 1878	14	466
Soap, Toilet.	J. W. Thomas.	6,324	July 2, 1878	14	8
Soap, Toilet.	H. & J. Brewer.	5,512	Jan. 15, 1878	13	11
Soda and cream of tartar.	C. R. Burrage.	6,186	June 11, 1878	13	1047
Soda-salt, caustic soda, bleaching-powder, &c.	J. L. & D. S. Riker.	6,038	May 7, 1878	13	820
Soda, Carbonate of.	C. R. Burrage.	6,220	June 18, 1878	13	1063
Soda-water and temperance beer.	R. Robinson.	6,631	Sept. 24, 1878	14	450
Soda-water, seltzer-water, and ginger-pop.	Sass & Hafluer.	6,373	July 10, 1878	14	86
Soda-water, seltzer-water, and ginger-pop.	Haves Brothers.	6,290	June 25, 1878	13	1130
Soda-water, seltzer-water, ginger-pop, and mineral waters.	W. H. Hutchinson & Son.	6,070	Oct. 8, 1878	14	525
Spiced seasonings.	W. G. Bell & Co.	6,320	July 9, 1878	14	47
Spices.	Sherman Brothers & Co.	6,590	Sept. 17, 1878	14	416
Spool-cotton.	Claffin, Larrabee & Co.	5,954	Apr. 30, 1878	13	773
Spool-cotton.	Clark Thread Company.	6,770	Nov. 5, 1878	14	680
Spool-cotton.	L. Coleman & Co.	6,305	July 2, 1878	14	8
Spool-cotton.	R. W. Ferguson.	6,734	Oct. 22, 1878	14	602
Spool-cotton.	Mount Tom Thread Company.	5,548	Jan. 22, 1878	13	126
Spool-cotton.	T. Russell.	6,202	June 11, 1878	13	1048
Spool-cotton.	C. T. Smith.	5,844	Apr. 9, 1878	13	658
Spool-cotton.	A. D. Warren.	6,452	Aug. 6, 1878	14	206
Spool-cotton.	W. Warren.	6,375	July 16, 1878	14	86
Spool-cotton.	W. Warren.	6,382	July 16, 1878	14	86
Spool-cotton.	W. Warren.	6,518	Aug. 27, 1878	14	310
Spool-cotton.	Willimantic Linen Company.	5,768	Mar. 10, 1878	13	501
Spool-cotton.	Willimantic Linen Company.	5,700	Mar. 10, 1878	13	501
Spool-cotton.	Willimantic Linen Company.	5,770	Mar. 10, 1878	13	501
Spool-cotton or cotton thread.	J. & P. Coats.	5,729	Mar. 12, 1878	13	457
Spool-cotton or thread.	Mount Tom Thread Company.	5,805	Apr. 2, 1878	13	586
Stains, &c., from silk, woolen, &c., Preparation for removing.	Western Manufacturing Company.	6,866	Dec. 3, 1878	14	824
Starch.	Buffalo Grape Sugar Company.	5,505	Jan. 15, 1878	13	11
Starch.	Buffalo Grape Sugar Company.	5,506	Jan. 15, 1878	13	11
Starch.	Buffalo Grape Sugar Company.	5,507	Jan. 15, 1878	13	11
Starch.	Buffalo Grape Sugar Company.	5,508	Jan. 15, 1878	13	11
Starch.	Buffalo Grape Sugar Company.	5,635	Feb. 12, 1878	13	278
Starch.	Buffalo Grape Sugar Company.	5,636	Feb. 12, 1878	13	278
Starch.	Buffalo Grape Sugar Company.	6,282	June 25, 1878	13	1130
Starch.	W. E. Plummer & Son.	5,959	Apr. 30, 1878	13	773
Starch, All kinds of.	F. S. Waters.	6,057	Oct. 1, 1878	14	488
Starch, All kinds of.	F. S. Waters.	6,058	Oct. 1, 1878	14	488
Steam-boilers, Fluid for preventing incrustation in.	J. H. Morris.	5,621	Feb. 12, 1878	13	278
Steam-engines.	Armington & Sims.	5,916	Apr. 23, 1878	13	729
Steel bars, plates, rods, and wire, Cast.	F. Hobson & Son.	6,567	Sept. 10, 1878	14	360
Stench-traps.	L. Brandies.	6,168	June 4, 1878	13	1012
Stone and artificial-stone goods, such as garden-vases, &c., Artificial.	J. Willett.	6,051	May 14, 1878	13	871
Stove and stove-polish.	G. A. Hyers.	6,811	Nov. 19, 1878	14	750
Stove-polish.	W. Frankfurth & Co.	6,356	July 16, 1878	14	86
Stove-polish.	J. C. Jacoby & Co.	6,488	Aug. 20, 1878	14	272
Stove-polish.	Phoenix Plumbago Mining Company.	6,401	July 23, 1878	14	120
Stove-polish.	Phoenix Plumbago Mining Company.	6,415	July 30, 1878	14	160
Stove-polish.	S. T. Smith.	6,211	June 11, 1878	13	1048
Stove-polish.	I. X. L. Stove Polish Company.	6,350	July 9, 1878	14	48
Stove-polish.	H. S. Ziegler.	6,084	May 14, 1878	13	872
Stove-polish and plumbago.	G. F. Gantz.	5,608	Feb. 5, 1878	13	232
Stoves and ranges.	W. C. Davis & Co.	6,232	June 18, 1878	13	1063
Stoves, Cook.	B. R. Hawley.	5,703	Mar. 5, 1878	13	410
Stoves, Cooking.	S. S. Jewett & Co.	6,258	June 18, 1878	13	1064
Stoves, Cooking.	S. S. Jewett & Co.	6,259	June 18, 1878	13	1064
Stoves, Cooking.	S. S. Jewett & Co.	6,475	Aug. 13, 1878	14	236
Stoves, Heating and cooking.	Detroit Stove Works.	6,435	Aug. 6, 1878	14	206
Stoves, Parlor.	S. S. Jewett & Co.	6,276	June 25, 1878	13	1130
Stoves, Wood heating.	S. S. Jewett & Co.	6,466	Aug. 13, 1878	14	236
Stoves, Wood heating.	S. S. Jewett & Co.	6,476	Aug. 13, 1878	14	236
Sugars.	A. Wakeman, jr., and E. A. Thompson.	5,753	Mar. 12, 1878	13	458
Surgical bandages, Elastic.	I. B. Seeley.	5,796	Mar. 26, 1878	13	550
Suspenders and braces.	Hewins & Hollis.	5,470	Jan. 1, 1878	13	8
T.					
Table-sauces, Extracts for making.	G. Norton.	6,075	May 14, 1878	13	872
Tea.	J. W. Hamblet.	6,393	July 9, 1878	14	48
Tea.	J. R. Walsh.	5,802	Apr. 16, 1878	13	678
Teas.	Cuthbert, Hamilton & Co.	5,701	Mar. 5, 1878	13	410
Teas.	M. Ehnman & Co.	5,467	Jan. 1, 1878	13	8
Teas.	J. A. Folger & Co.	5,538	Jan. 22, 1878	13	126

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For what purpose.	Name of patentee.	No.	Date.	Official Gazette.	
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Teas	J. A. Folger & Co	5,539	Jan. 22, 1878	13	126
Teas	J. A. Folger & Co	5,540	Jan. 22, 1878	13	126
Teas	Griffin & Co	6,871	Dec. 10, 1878	14	862
Teeth, Preparation for filling.	Q. A. Scott	6,050	May 14, 1878	13	871
Theatrical and gymnastic apparatus	W. Farini	6,748	Oct. 22, 1878	14	602
Thrashing-machines	Roberts, Throp & Co	5,565	Jan. 22, 1878	13	126
Thrashing-machines	Seymour, Sabin & Co	6,481	Aug. 13, 1878	14	236
Thread	Hadley Company	6,197	June 11, 1878	13	1047
Thread, Spool	G. M. Jacobs & Co	5,525	Jan. 15, 1878	13	11
Tickings	Eagle and Phenix Manufacturing Company.	6,436	Aug. 6, 1878	14	206
Tobacco and cigarettes, Smoking	C. Early	6,387	July 23, 1878	14	120
Tobacco and cigarettes, Smoking	C. G. Emery	5,556	Jan. 22, 1878	13	126
Tobacco and cigarettes, Smoking	Goodwin & Co	6,791	Nov. 12, 1878	14	716
Tobacco and cigarettes, Smoking	E. L. Witthaus	5,530	Jan. 15, 1878	13	11
Tobacco and cigarettes, Smoking and chewing	F. W. Felgner & Son	5,730	Mar. 12, 1878	13	457
Tobacco, and cigars, cigarettes, and snuff, Smoking and chewing.	G. W. Gail & Ax	5,518	Jan. 15, 1878	13	11
Tobacco and cigars, Fine-cut chewing	A. E. Irwin	5,881	Apr. 16, 1878	13	678
Tobacco and cigars, Smoking and chewing	Allen & Co	6,617	Sept. 24, 1878	14	450
Tobacco and cigars, Smoking and chewing	H. Welsh	6,405	July 23, 1878	14	120
Tobacco and cigars, Smoking and chewing	H. Welsh	6,406	July 23, 1878	14	120
Tobacco and cigars, Smoking and chewing	H. Welsh	6,407	July 23, 1878	14	120
Tobacco and cigars, Smoking and chewing	H. Welsh	6,408	July 23, 1878	14	120
Tobacco and cigars, Smoking and chewing	H. Welsh	6,409	July 23, 1878	14	120
Tobacco and cigars, Smoking and chewing	H. Welsh	6,410	July 23, 1878	14	120
Tobacco and cigars, Smoking and chewing	B. F. Weyman	6,830	Nov. 26, 1878	14	787
Tobacco and cigars, Smoking and chewing	B. F. Weyman	6,831	Nov. 26, 1878	14	788
Tobacco and cigars, Smoking and chewing	B. F. Weyman	6,832	Nov. 26, 1878	14	788
Tobacco and snuff, Smoking and chewing	J. M. Gardiner	6,248	June 18, 1878	13	1084
Tobacco-bags	W. J. Cussen	6,040	May 14, 1878	13	871
Tobacco-bags	W. J. Cussen	6,620	Sept. 24, 1878	14	450
Tobacco, Chewing	J. W. & C. G. Holland	5,851	Apr. 9, 1878	13	638
Tobacco, Chewing	J. W. & C. G. Holland	5,852	Apr. 9, 1878	13	638
Tobacco, Chewing	J. W. & C. G. Holland	5,854	Apr. 9, 1878	13	638
Tobacco, Chewing	J. W. & C. G. Holland	5,923	Apr. 23, 1878	13	729
Tobacco, Chewing	F. M. and E. C. Morten	6,074	May 14, 1878	13	872
Tobacco, Chewing	R. A. Patterson & Co	6,252	June 18, 1878	13	1084
Tobacco, Chewing	R. A. Patterson & Co	6,623	Sept. 24, 1878	14	450
Tobacco, Chewing	State of Kentucky Tobacco Manufacturing Company.	5,683	Feb. 26, 1878	13	370
Tobacco, Chewing	S. W. Venable & Co	6,219	June 11, 1878	13	1048
Tobacco, Chewing and smoking	Buchanan & Lyall	5,554	Jan. 22, 1878	13	126
Tobacco, Chewing and smoking	J. G. Dill	6,878	Dec. 17, 1878	14	903
Tobacco, Chewing and smoking	J. G. Dill	6,879	Dec. 17, 1878	14	903
Tobacco, Chewing and smoking	J. G. Dill	6,880	Dec. 17, 1878	14	903
Tobacco, Chewing and smoking	J. G. Dill	6,881	Dec. 17, 1878	14	903
Tobacco, Chewing and smoking	Frishmuth, Brother & Co	6,119	May 21, 1878	13	918
Tobacco, Chewing and smoking	Newina & Griswold	6,015	May 7, 1878	13	819
Tobacco, Chewing and smoking	J. B. Pace	5,912	Apr. 23, 1878	13	729
Tobacco, Chewing and smoking	Pace, Talbot & Co	6,089	May 14, 1878	13	872
Tobacco, Chewing and smoking	T. C. Williams & Co	6,703	Oct. 8, 1878	14	526
Tobacco, cigars, and cigarettes, Chewing and smoking	Goodwin & Co	6,735	Oct. 22, 1878	14	602
Tobacco, cigars, and cigarettes, Smoking	American News Company	6,489	Aug. 20, 1878	14	272
Tobacco, cigars, and cigarettes, Smoking	American News Company	6,508	Aug. 20, 1878	14	272
Tobacco, cigars, and cigarettes, Smoking	American News Company	6,543	Sept. 3, 1878	14	348
Tobacco, cigars, and cigarettes, Smoking	American News Company	6,544	Sept. 3, 1878	14	348
Tobacco, cigars, and cigarettes, Smoking and chewing	Goodwin & Co	6,815	Nov. 19, 1878	14	750
Tobacco, cigars, and cigarettes, Smoking and chewing	Simmons & Staiger	6,533	Sept. 3, 1878	14	348
Tobacco, cigars, cigarettes, and snuff, Chewing	Marburg Brothers	6,217	June 11, 1878	13	1048
Tobacco, cigars, cigarettes, and snuff, Chewing and smoking.	G. W. Gail & Ax	6,637	Oct. 1, 1878	14	487
Tobacco, cigars, cigarettes, and snuff, Chewing and smoking.	G. W. Gail & Ax	6,638	Oct. 1, 1878	14	487
Tobacco, cigars, cigarettes, and snuff, Chewing and smoking.	G. W. Gail & Ax	6,639	Oct. 1, 1878	14	487
Tobacco, cigars, cigarettes, and snuff, Chewing and smoking.	G. W. Gail & Ax	6,640	Oct. 1, 1878	14	487
Tobacco, cigars, cigarettes, and snuff, Chewing and smoking.	G. W. Gail & Ax	6,641	Oct. 1, 1878	14	487
Tobacco, cigars, cigarettes, and snuff, Chewing and smoking.	G. W. Gail & Ax	6,643	Oct. 1, 1878	14	487
Tobacco, cigars, cigarettes, and snuff, Chewing and smoking.	G. W. Gail & Ax	6,646	Oct. 1, 1878	14	488
Tobacco, cigars, cigarettes, and snuff, Chewing and smoking.	G. W. Gail & Ax	6,647	Oct. 1, 1878	14	488
Tobacco, cigars, cigarettes, and snuff, Chewing and smoking.	G. W. Gail & Ax	6,648	Oct. 1, 1878	14	488
Tobacco, cigars, cigarettes, and snuff, Chewing and smoking.	Marburg Brothers	6,872	Dec. 10, 1878	14	862
Tobacco, cigars, cigarettes, and snuff, Smoking and chewing.	A. G. Fuller & Co	5,607	Feb. 5, 1878	13	232
Tobacco, cigars, cigarettes, and snuff, Smoking and chewing.	G. W. Gail & Ax	6,173	June 4, 1878	13	1012
Tobacco, cigars, cigarettes, and snuff, Smoking and chewing.	F. Jones	6,615	Sept. 24, 1878	14	450
Tobacco, Fine-cut chewing	Goodwin & Co	5,702	Mar. 5, 1878	13	410
Tobacco, Fine-cut chewing	R. Hamilton	6,772	Nov. 5, 1878	14	680
Tobacco, Fine-cut chewing	C. B. Hull	6,053	May 14, 1878	13	871
Tobacco, Fine-cut chewing	Reid, Murdoch & Fischer	6,891	Dec. 17, 1878	14	904
Tobacco, Leaf	Seidenberg & Co	6,185	June 4, 1878	13	1012
Tobacco, Manufactured	Allen Co	5,643	Feb. 12, 1878	13	278
Tobacco, Plug	Allen & Ellis	6,689	Oct. 8, 1878	14	525
Tobacco, Plug	Boyd & Co	5,481	Jan. 8, 1878	13	48
Tobacco, Plug	Bulkley & Moore	5,715	Mar. 12, 1878	13	457

*Alphabetical list of trade-marks—Continued.*

For what purpose.	Name of patentee.	No.	Date.	Official Gazette.	
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Tobacco, Plug .....	Cullingworth, Gregory & Ellison .....	5,967	Apr. 30, 1878	13	773
Tobacco, Plug .....	J. G. Dill .....	5,658	Feb. 19, 1878	13	326
Tobacco, Plug .....	I. Eppinger .....	5,468	Jan. 1, 1878	13	8
Tobacco, Plug .....	Liggett & Myers Company .....	6,391	July 23, 1878	14	120
Tobacco, Plug .....	Loker Tobacco Company .....	5,544	Jan. 22, 1878	13	126
Tobacco, Plug .....	Loker Tobacco Company .....	5,611	Feb. 5, 1878	13	232
Tobacco, Plug .....	Merchants' Tobacco Company .....	6,255	June 18, 1878	13	1084
Tobacco, Plug .....	Pioneer Tobacco Company .....	5,522	Jan. 15, 1878	13	11
Tobacco, Plug .....	Pioneer Tobacco Company .....	5,819	Apr. 2, 1878	13	596
Tobacco, Plug .....	Reid, Murdoch & Fischer .....	6,892	Dec. 17, 1878	14	994
Tobacco, Plug .....	Ryan & Cunniskey .....	5,684	Feb. 23, 1878	13	370
Tobacco, Plug .....	R. M. Smith .....	5,751	Mar. 12, 1878	13	458
Tobacco, Plug .....	B. F. Weyman .....	6,148	May 28, 1878	13	970
Tobacco, Plug .....	Buchanan & Lyall .....	5,553	Jan. 22, 1878	13	126
Tobacco, Plug .....	H. M. Cochran .....	5,838	Apr. 9, 1878	13	658
Tobacco, Plug .....	H. M. Cochran .....	6,873	Dec. 10, 1878	14	802
Tobacco, Plug .....	Dausman & Drummond Tobacco Com- pany .....	5,618	Feb. 5, 1878	13	232
Tobacco, Plug chewing .....	Gem City Tobacco Works .....	5,484	Jan. 8, 1878	13	48
Tobacco, Plug chewing .....	Gem City Tobacco Works .....	5,557	Jan. 22, 1878	13	126
Tobacco, Plug chewing .....	W. & A. Leaman .....	6,317	July 2, 1878	14	8
Tobacco, Plug chewing .....	Lovell & Gedde .....	6,674	Oct. 8, 1878	14	525
Tobacco, Plug chewing .....	P. H. Mayo & Brother .....	6,574	Sept. 17, 1878	14	916
Tobacco, Plug chewing .....	P. McNamara & Co .....	6,109	May 21, 1878	13	418
Tobacco, Plug chewing .....	Musselman & Co .....	6,588	Sept. 17, 1878	14	416
Tobacco, Plug chewing .....	R. A. Patterson .....	6,371	July 16, 1878	14	86
Tobacco, Plug chewing .....	Senour, Simrall & Noonan .....	5,670	Feb. 19, 1878	13	326
Tobacco, Plug chewing .....	Wilson & McCallay .....	6,123	May 21, 1878	13	918
Tobacco, Plug or chewing .....	H. Welsh .....	6,446	Aug. 6, 1878	14	266
Tobacco, Plug or chewing .....	H. Welsh .....	6,447	Aug. 6, 1878	14	266
Tobacco, Plug or chewing .....	H. Welsh .....	6,448	Aug. 6, 1878	14	266
Tobacco, Plug or chewing .....	H. Welsh .....	6,449	Aug. 6, 1878	14	266
Tobacco, Smoking .....	Allen & Dunning .....	6,240	June 18, 1878	13	1063
Tobacco, Smoking .....	Beck & Feldkamp .....	6,285	June 25, 1878	13	1130
Tobacco, Smoking .....	R. M. Chambers .....	5,837	Apr. 9, 1878	13	638
Tobacco, Smoking .....	B. L. Duke .....	6,206	June 11, 1878	13	1048
Tobacco, Smoking .....	G. W. Gail & Ax .....	6,644	Oct. 1, 1878	14	487
Tobacco, Smoking .....	G. W. Gail & Ax .....	6,645	Oct. 1, 1878	14	488
Tobacco, Smoking .....	G. W. Gail & Ax .....	6,755	Oct. 29, 1878	14	636
Tobacco, Smoking .....	S. F. Hess & Co .....	5,705	Mar. 5, 1878	13	419
Tobacco, Smoking .....	S. M. Johnson & Brother .....	6,672	Oct. 8, 1878	14	525
Tobacco, Smoking .....	B. Leidersdorf & Co .....	5,842	Apr. 9, 1878	13	638
Tobacco, Smoking .....	B. Leidersdorf & Co .....	5,884	Apr. 16, 1878	13	678
Tobacco, Smoking .....	B. Leidersdorf & Co .....	6,504	Aug. 20, 1878	14	272
Tobacco, Smoking .....	B. Leidersdorf & Co .....	6,505	Aug. 20, 1878	14	272
Tobacco, Smoking .....	B. Leidersdorf & Co .....	6,629	Sept. 24, 1878	14	459
Tobacco, Smoking .....	C. R. Messinger .....	6,530	Sept. 3, 1878	14	348
Tobacco, Smoking .....	Oliver & Robinson .....	5,927	Apr. 23, 1878	13	730
Tobacco, Smoking .....	Oliver & Robinson .....	5,945	Apr. 23, 1878	13	730
Tobacco, Smoking .....	E. H. Pogue .....	6,018	May 7, 1878	13	819
Tobacco, Smoking .....	M. Riquelme .....	5,519	Jan. 15, 1878	13	11
Tobacco, Smoking .....	Roulhac & Co .....	6,184	June 4, 1878	13	1012
Tobacco, Smoking .....	Roulhac & Co .....	6,749	Oct. 22, 1878	14	662
Tobacco, Smoking .....	Roundy, Peckham & Co .....	5,989	Apr. 30, 1878	13	774
Tobacco, Smoking .....	G. Suich .....	5,990	Apr. 30, 1878	13	774
Tobacco, Smoking .....	B. F. Weyman .....	5,948	Apr. 23, 1878	13	730
Tobacco, Smoking and chewing .....	J. W. & C. G. Holland .....	5,853	Apr. 9, 1878	13	638
Tobacco, Smoking and chewing .....	B. Leidersdorf & Co .....	6,561	Sept. 10, 1878	14	389
Tobacco, Smoking and chewing .....	MacIn & Barclay .....	6,477	Aug. 13, 1878	14	236
Tobacco, Smoking and chewing .....	Marburg Brothers .....	6,143	May 28, 1878	13	970
Tobacco, Smoking and chewing .....	H. W. Meyer .....	6,728	Oct. 15, 1878	14	562
Tobacco, Smoking and chewing .....	W. W. Phillips .....	5,815	Apr. 2, 1878	13	568
Tobacco, Smoking and chewing .....	Rowland & Newbrandt .....	5,887	Apr. 16, 1878	13	678
Tobacco, Smoking and chewing .....	Spaulding & Merrick .....	6,776	Nov. 5, 1878	14	689
Tobacco, Smoking and chewing .....	W. C. Thomas .....	6,850	Nov. 26, 1878	14	788
Tobacco, Smoking and chewing .....	T. C. Williams & Co .....	6,381	July 16, 1878	14	86
Tobacco, Twist .....	J. W. & C. G. Holland .....	5,493	Jan. 8, 1878	13	48
Toilet preparation .....	W. H. Hall .....	5,502	Jan. 15, 1878	13	10
Toilet preparation .....	A. & M. Landon .....	6,758	Oct. 29, 1878	14	636
Toilet preparation for the complexion .....	J. A. Burnham .....	5,626	Feb. 12, 1878	13	277
Tonic .....	Craft & Taylor .....	6,311	July 2, 1878	14	8
Tonic .....	G. W. M. Reed .....	5,843	Apr. 9, 1878	13	638
Tooth-powder .....	A. L. Calder .....	6,762	Oct. 29, 1878	14	636
Towelings .....	Wilmerding, Biddle & Bisset .....	5,937	Apr. 23, 1878	13	730
Toys .....	J. A. Crandall .....	5,859	Apr. 16, 1878	13	677
Toys .....	A. Meisel .....	6,088	May 14, 1878	13	872
Toys and toy vehicles .....	C. W. F. Dare .....	6,576	Sept. 17, 1878	14	416
Troches, lozenges, or wafers, Bronchial .....	Dabbis Brothers .....	5,514	Jan. 15, 1878	13	11
Troches, lozenges, pills, pastilles, and similar preparations .....	J. F. Hayes .....	5,969	Apr. 30, 1878	13	774
Trusses for the treatment of hernia, &c .....	I. B. Seeley .....	5,794	Mar. 26, 1878	13	559
U.					
Umbrellas and parasols .....	A. Lyon .....	6,241	June 18, 1878	13	1083
Undershirts and under-drawers .....	Dunham Hosiery Company .....	6,155	May 28, 1878	13	970
V.					
Vinegar .....	Alden & Brother .....	6,310	July 2, 1878	14	8
Vinegar, Essence of .....	Verein für Chemische Industrie .....	6,325	July 2, 1878	14	8
W.					
Wagons, carriages, and sleighs .....	R. M. Stivers .....	6,524	Aug. 27, 1878	14	310
Wash-boards .....	Union Manufacturing Company .....	6,212	June 11, 1878	13	1948

*Alphabetical list of trade-marks—Continued.*

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Washstands	J. W. Pangborn	5,531	Jan. 15, 1878	13	11
Washing-machines	Oakley & Keating	6,017	May 7, 1878	13	819
Washing-powder	F. Phillips	6,402	July 23, 1878	14	120
Watch-cases	J. Fahys	6,086	May 14, 1878	13	872
Watch-springs	Sussfeld, Lorsch & Co	5,634	Feb. 12, 1878	13	278
Watches	E. D. & C. M. Howard	5,720	Mar. 12, 1878	13	457
Watches	E. D. & C. M. Howard	5,721	Mar. 12, 1878	13	457
Watches	Lake Shore Watch Company	6,122	May 21, 1878	13	918
Water-closet	Bartholomew & Co.	5,699	Mar. 5, 1878	13	410
Water-closet	Zane & Roach	6,471	Aug. 13, 1878	14	236
Water-proof wearing apparel	C. E. Tuthill	5,637	Feb. 12, 1878	13	278
Wheat, corn, and rye flour	Union Steam Mills Company	5,638	Feb. 12, 1878	13	278
Wheat, corn, and rye flour	Union Steam Mills Company	5,639	Feb. 12, 1878	13	278
Wheat, corn, and rye flour	Union Steam Mills Company	5,640	Feb. 12, 1878	13	278
Wheat-fans	E. Whitman, Sons & Co.	5,689	Feb. 26, 1878	13	370
Whips	Peck, Osden & Co.	6,827	Nov. 26, 1878	14	787
Whiskies	H. Rosenheim	5,707	Mar. 5, 1878	13	410
Whiskies	Leienthal & Co.	6,358	July 16, 1878	14	86
Whisky	E. H. Chase & Co.	6,057	May 14, 1878	13	871
Whisky	Chesapeake Whisky Company	6,770	Nov. 5, 1878	14	689
Whisky	Crane, Hastings & Co.	6,294	June 25, 1878	13	1130
Whisky	Ellison & Harvey	6,710	Oct. 8, 1878	14	526
Whisky	J. W. Gaff & Co.	5,977	Apr. 30, 1878	13	774
Whisky	J. W. Gaff & Co.	6,363	July 16, 1878	14	86
Whisky	Gregory, Stagg & Co.	6,707	Oct. 8, 1878	14	526
Whisky	A. Hanford & Co.	6,357	July 16, 1878	14	86
Whisky	A. Hanford & Co.	6,378	July 16, 1878	14	86
Whisky	Mohr, Mohr & Co.	6,318	July 2, 1878	14	8
Whisky	A. & H. Myers	5,911	Apr. 23, 1878	13	729
Whisky	C. F. O'Donnell	5,814	Apr. 2, 1878	13	598
Whisky	C. F. O'Donnell	6,124	May 21, 1878	13	918
Whisky	J. B. Peacock & Co.	6,853	Nov. 26, 1878	14	788
Whisky	C. H. Ross & Co.	6,416	July 30, 1878	14	160
Whisky	C. H. Ross & Co.	6,417	July 30, 1878	14	160
Whisky	C. H. Ross & Co.	6,418	July 30, 1878	14	160
Whisky	C. H. Ross & Co.	6,419	July 30, 1878	14	160
Whisky	C. H. Ross & Co.	6,420	July 30, 1878	14	160
Whisky	C. H. Ross & Co.	5,789	Mar. 26, 1878	13	550
Whisky	Sattler & Co.	5,963	Apr. 30, 1878	13	773
Whisky	Sperry, Wade & Co.	6,021	May 7, 1878	13	820
Whisky	E. Stern	6,715	Oct. 8, 1878	14	526
Whisky	E. H. Taylor, Jr.	6,430	July 30, 1878	14	160
Whisky, Bourbon	Bleecker & Co.	6,887	Dec. 17, 1878	14	904
Wicks, Chemically-prepared	L. Hellman	6,250	June 18, 1878	13	1084
Wine	P. S. Lewis & Co.	5,545	Jan. 22, 1878	13	126
Wines	J. Calvert & Co.	5,858	Apr. 10, 1878	13	677
Wines and brandies	Renault, François & Co.	6,468	Aug. 13, 1878	14	236
Wines and brandies	J. B. Clerc	6,263	June 18, 1878	13	1084
Wines, Still and sparkling	R. Henkell	6,793	Nov. 12, 1878	14	716
Wire-cloth of all kinds	D. R. Morse	6,097	Oct. 8, 1878	14	526
Wooden ware	D. H. Wilder	5,780	Mar. 19, 1878	13	501
Wool detergent and bleaching compound	Myers & Co.	5,761	Mar. 19, 1878	13	501
Wrenches	Girard Wrench Manufacturing Company	5,880	Apr. 16, 1878	13	678
Wringing, fluting, and plaiting machines and sad-irons	American Machine Company	6,844	Nov. 26, 1878	14	788
Writing-fluid	Carter, Dinsmore & Co.	6,355	July 16, 1878	14	86
Writing fluid or ink	J. Davids & Co.	6,058	May 14, 1878	13	571
Y.					
Yarns, Woolen and worsted	R. Blankenburg	6,527	Sept. 3, 1878	14	348
Yarns, Woolen or worsted	J. C. Graham	5,840	Apr. 9, 1878	13	638
Yeast	Richard & Wood	5,833	Apr. 9, 1878	13	638
Yeast, Compressed	J. W. Gaff & Co.	5,517	Jan. 15, 1878	13	11
Yeast, Compressed	O. King	5,910	Apr. 23, 1878	13	729
Yeast, Dry hop	Judd Brothers Yeast Company	6,465	Aug. 13, 1878	14	236
Yeast-powder	P. M. Goodwyn	5,772	Mar. 19, 1878	13	501
Yeast-powders	Taylor Manufacturing Company	6,280	June 25, 1878	13	1130

## ALPHABETICAL LIST OF LABELS.

Title.	Name.	No.	Date.	Official Gazette.	
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A.					
"A. A. Freeman & Co., 196 Dundas"	A. A. Freeman & Co.	1,785	Nov. 26, 1878	14	788
"A. A. Freeman & Co., 196 Nonpareil"	A. A. Freeman & Co.	1,786	Nov. 26, 1878	14	788
"A. A. Freeman & Co., 196 Superlative"	A. A. Freeman & Co.	1,756	Nov. 5, 1878	14	680
"Above All"	Kerbs & Spiess	1,658	Aug. 20, 1878	14	272
"Advance Oil Works"	A. K. Lynch	1,811	Dec. 10, 1878	14	862
"Etna"	W. Wicke & Co.	1,806	Dec. 3, 1878	14	824
"Albion Vegetable Oil Soap"	Cornwall & Brother.	1,411	Feb. 10, 1878	13	326
"Allen's Compound Extract of Butternut for the Blood"	W. Allen	1,448	Mar. 10, 1878	13	501
"Amateurs"	Heppenheimer & Maurer	1,482	Apr. 16, 1878	13	678
"American Cousin"	Heppenheimer & Maurer	1,400	Apr. 2, 1878	13	568
"American Silk-Finish Spool-Cotton"	Willimantic Linen Co.	1,384	Jan. 20, 1878	13	180
"American Sports"	A. Lichtenstein & Brother	1,675	Sept. 3, 1878	14	248
"American Standard Gauge & Tool Works, Philadelphia, U. S. A."	J. Richards & Co.	1,743	Oct. 29, 1878	14	636
"Amorosa"	Schumacher & Eitlinger	1,541	May 14, 1878	13	872
"Angelica Bitters or Poor Man's Tonic"	G. A. Fickardt	1,553	May 28, 1878	13	970
"Angostura Aromatic Bitters"	C. W. Abbott & Co.	1,449	Mar. 19, 1878	13	501
"Anti-Corrosive Car Box Oil"	E. H. Kellogg	1,418	Feb. 10, 1878	13	326
"Anti-Lean, The Greatest Medical Discovery of the Age"	J. D. Judge	1,674	Sept. 3, 1878	14	248
"Antonio Y. Cleopatra"	C. G. Peterson	1,713	Oct. 8, 1878	14	526
"Any Lady Using our Silk Will be Presented with one of These by Sending one of our Empty Spools to Either Office."	Brainerd, Armstrong & Co.	1,455	Mar. 26, 1878	13	550
"Aqua A. Santa Maria Della Scala, or Carmeliten Geist"	Missionary Society at Mount Carmel Monastery.	1,787	Nov. 26, 1878	14	788
"Arizona"	New York Label Publishing Company of N. Witsch and J. Schmitt.	1,747	Oct. 29, 1878	14	636
"Aromatic Extract of Jamaica Ginger"	Holbrook & Co.	1,483	Apr. 16, 1878	13	678
"Ashwell's Solid Cooked Corned Beef"	Ashwell & Co.	1,337	Jan. 1, 1878	13	8
"Austen's Forest Flower Cologne"	W. J. Austen	1,672	Sept. 3, 1878	14	348
"Australian Balm—The Best in the World"	Marshall & Co.	1,641	July 30, 1878	14	160
"Autumn"	Heppenheimer & Maurer	1,717	Oct. 15, 1878	14	562
"A. W. Pratt & Co., Manufacturers of Varnishes, &c"	A. W. Pratt & Co.	1,365	Jan. 22, 1878	13	125
B.					
"Bairstow's Ivorytype Colors"	W. A. Bairstow	1,512	May 7, 1878	13	820
"Bancroft's German Balsam"	A. B. Crooks	1,791	Dec. 3, 1878	14	824
"Banquet"	New York Label Publishing Company of N. Witsch and J. Schmitt.	1,760	Nov. 5, 1878	14	688
"Barbour's Irish Flax Best Shoe Thread"	Barbour Brothers	1,738	Oct. 29, 1878	14	636
"Barbour's Standard Best Irish Flax Shoe Thread"	Barbour Brothers	1,737	Oct. 29, 1878	14	636
"Baron Gerard Mende's Preserving Compound"	A. C. Sheldon	1,600	July 2, 1878	14	8
"Beauté Du Teint, Levy's French Cream"	B. Levy & Co.	1,559	May 28, 1878	13	970
"Beaver File Works"	Western File Company (limited)	1,498	Apr. 23, 1878	13	739
"Beaver File Works"	Western File Company (limited)	1,480	Apr. 9, 1878	13	638
"Beef Tonic"	Caswell, Hazard & Co.	1,513	May 7, 1878	13	820
"Beef Tonic"	Caswell, Hazard & Co.	1,514	May 7, 1878	13	820
"Bennett's Great Rheumatic Compound—The Lame Man's Friend"	W. W. Bennett	1,450	Mar. 19, 1878	13	501
"Benzine Soap"	A. Melzer	1,364	Jan. 22, 1878	13	125
"Best Havana"	Heppenheimer & Maurer	1,834	Jan. 1, 1878	13	8
"Best Pickles"	Curtice Brothers	1,781	Nov. 26, 1878	14	788
"Best Quality Hand Laid Linen Fish Lines"	J. & S. Allen	1,670	Sept. 3, 1878	14	348
"Black Diamonds"	Levy Brothers	1,667	Aug. 27, 1878	14	310
"Black's Expectorative"	J. R. Gorham, Jr.	1,348	Jan. 8, 1878	13	48
"Blake's Belt Stud"	Greene, Tweed & Co.	1,490	Apr. 23, 1878	13	739
"Blazes"	New York Label Publishing Company of N. Witsch and J. Schmitt.	1,813	Dec. 10, 1878	14	862
"Blue Bell Cornwall & Brother"	Cornwall & Brother	1,413	Feb. 19, 1878	13	326
"Brenenstuhll's Elastic Waterproof Leather Dressing, etc."	E. J. Heyer and W. F. Brenenstuhll.	1,594	July 2, 1878	14	8
"Britton's Ague Pills"	F. M. Gooding	1,555	May 28, 1878	13	970
"Brown's Best Family Flour for C. B. & Y."	Hicks, Brown & Co.	1,799	Dec. 3, 1878	14	824
"Brown's Macerated Mfg. Co., etc."	J. D. J. E. and W. T. Brown	1,678	Sept. 3, 1878	14	348
"Bucklen's Arnica Salve"	H. E. Bucklen	1,440	Mar. 12, 1878	13	458
"Budweiser Lager Beer"	C. Conrad & Co.	1,700	Dec. 3, 1878	14	824
"Buffalo Noiseless Blind Hinge"	Clark & Co.	1,670	Sept. 3, 1878	14	348
"Buff's Cough Cure"	Darby & Williams	1,656	Aug. 20, 1878	14	272
"Bunsen's Dyspepsia Cure"	Sloan & Co.	1,434	Mar. 5, 1878	13	410
"Burbank's Grease Extractor"	H. A. Burbank	1,782	Nov. 26, 1878	14	788
"Byerly's Gonorrhœa Mixture"	Sloan & Co.	1,435	Mar. 5, 1878	13	410
"By Trenholm's Patent Locked Cart"	F. H. Trenholm	1,734	Oct. 22, 1878	14	602
C.					
"Cabalist"	Heppenheimer & Maurer	1,610	July 9, 1878	14	48
"Cairo City Coal Co."	Cairo City Coal Company	1,489	Apr. 23, 1878	13	739
"Calma's Liniment"	C. S. Childs	1,708	Oct. 8, 1878	14	526
"Camellia Lotion for Beautifying and Healing the Skin"	M. De Voy	1,575	June 18, 1878	13	1084
"Cameo Valentines"	A. J. Fisher	1,709	Oct. 8, 1878	14	526
"Campaign"	New York Label Publishing Company of N. Witsch and J. Schmitt.	1,766	Nov. 5, 1878	14	688
"Capwell's Kidney Regulator"	E. C. Capwell & Co.	1,628	July 23, 1878	14	120
"Carbolated Iron"	W. R. Warner & Co.	1,687	Sept. 10, 1878	14	330



## Alphabetical list of labels—Continued.

Title.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
"Carbolized Cosmoline"	E. F. Houghton & Co	1,693	Sept. 24, 1878	14	450
"Carbolized Cosmoline ('Sub Coratum Petrolei Carbolizatum')"	E. F. Houghton & Co	1,776	Nov. 19, 1878	14	750
"Caunen"	New York Label Publishing Company of N. Witsch and J. Schmitt.	1,728	Oct. 15, 1878	14	562
"Cash Sale"	P. Duesner, jr	1,340	Jan. 1, 1878	13	8
"Cassebeer's Ammonia Lozenges"	H. A. Cassebeer, jr	1,564	June 11, 1878	13	1012
"Catereba Cigarettes"	R. B. Heintzelman	1,545	May 21, 1878	13	918
"Caterson's Constitution Invigorating Compound Syrup"	W. M. Caterson	1,036	July 30, 1878	14	160
"Cavalier"	Boies, Fay & Conkey	1,801	July 2, 1878	14	8
"Central City Super Phosphate"	E. B. Crofut & Co.	1,840	July 30, 1878	14	160
"Central Iron Works"	J. T. Ryerson	1,599	July 2, 1878	14	8
"Central Iron Works, Marine Flange"	J. T. Ryerson	1,596	July 2, 1878	14	8
"Central Iron Works, Marine Flange 55,000," etc.	J. T. Ryerson	1,597	July 2, 1878	14	8
"Central Iron Works, S. F. B. 50,000," etc.	J. T. Ryerson	1,598	July 2, 1878	14	8
"C. F. Fish, Fancy Flour"	Fish, Storer & Davis	1,561	May 28, 1878	13	970
"Chas. Liddell & Co.'s Turkish Bath Soap"	C. Liddell & Co.	1,719	Oct. 15, 1878	14	562
"Chemical Spirit Gas"	L. H. Abrams	1,511	May 7, 1878	13	820
"Chicago Stove Polish"	H. G. Weatherill	1,820	Dec. 17, 1878	14	904
"Childs' Prize Medal Roofing Felt"	W. H. H. Childs	1,454	Mar. 19, 1878	13	501
"Chinkalypus"	V. E. Mauger	1,676	Sept. 3, 1878	14	348
"Clark's Improved Blind Hinges for Wood"	Clark & Co	1,642	Aug. 6, 1878	14	206
"Clysterium for the Cure of Leucorrhea, Inflammation, etc."	D. T. Gale	1,637	July 30, 1878	14	160
"Coca Beef Tonic"	M. Hoffman	1,682	Sept. 10, 1878	14	380
"Coca Beef Tonic with Sherry Wine and Iron"	M. Hoffman	1,681	Sept. 10, 1878	14	380
"Coca Bitters, the Great South American Tonic"	C. M. Fletcher	1,400	Feb. 12, 1878	13	278
"Coleman's Best St. Louis Flour"	Hicks, Brown & Co	1,800	Dec. 3, 1878	14	824
"Cole's Business Record"	L. Cole	1,551	May 28, 1878	13	970
"Colgate & Co.'s New Soap"	Colgate & Co.	1,770	Nov. 12, 1878	14	716
"Compound Witch Hazel Hair Restorer"	B. J. Dyer	1,353	Jan. 15, 1878	13	11
"Compound Witch Hazel Pills"	B. W. Dyer	1,342	Jan. 1, 1878	13	8
"Conversation"	New York Label Publishing Company of N. Witsch and J. Schmitt.	1,754	Oct. 29, 1878	14	636
"Convery, The Sign Painter"	J. R. Convery	1,457	Mar. 26, 1878	13	550
"Conrath's Complexion Powder"	Weller & Co	1,622	July 9, 1878	14	48
"Cook's Root and Herb Alternative"	R. T. Stone and J. Friend	1,549	May 21, 1878	13	918
"Cooper's Great Rheumatic Cure"	E. F. Cooper	1,531	May 14, 1878	13	872
"Cornwall & Brother Blueing Soap"	Cornwall & Brother	1,412	Feb. 19, 1878	13	326
"Cornwall & Brother Game Soap"	Cornwall & Brother	1,410	Feb. 19, 1878	13	326
"Cornwall & Brother Kentuckian Soap"	Cornwall & Brother	1,414	Feb. 19, 1878	13	326
"Cornwall & Brother National Soap"	Cornwall & Brother	1,409	Feb. 19, 1878	13	326
"Cornwall & Brother's Dixie's Delight"	Cornwall & Brother	1,408	Feb. 19, 1878	13	326
"Count Your Paper"	J. A. Dushane	1,387	Feb. 5, 1878	13	232
"Crack Shot"	New York Label Publishing Company of N. Witsch and J. Schmitt.	1,761	Nov. 5, 1878	14	680
"Curtis"	J. A. Lowell & Co	1,560	May 28, 1878	13	970
"Cutter's Infallible Rheumatic Remedy," etc.	W. Cutter	1,616	July 9, 1878	14	48
D.					
"Daisy"	Heppenheimer & Maurer	1,331	Jan. 1, 1878	13	8
"Dart's Cough Syrup," etc.	H. D. Dart	1,347	Jan. 8, 1878	13	48
"David's Prize Soap"	D. S. Brown & Co	1,623	July 10, 1878	14	86
"Davis' Hard Finish"	P. Hayden	1,817	Dec. 17, 1878	14	904
"Death to Corns, Bunions, and Chilblains"	J. Bath	1,689	Sept. 10, 1878	14	380
"Delaware Wheat Grits"	J. S. Detwiler & Co	1,339	Jan. 1, 1878	13	8
"Design for Medicine Label"	A. Snyder	1,438	Mar. 5, 1878	13	410
"Determino"	Heppenheimer & Maurer	1,335	Jan. 1, 1878	13	8
"Deusner's Merchandise Ticket"	P. Deusner, jr	1,584	June 25, 1878	13	1130
"Deusner's Merchandise Token"	P. Deusner, jr	1,691	Sept. 17, 1878	14	416
"Deusner's Merchandise Token"	P. Deusner, jr	1,808	Dec. 10, 1878	14	802
"Deusner's Ticket System"	P. Deusner, jr	1,458	Mar. 26, 1878	13	550
"Dextro Quinine"	H. G. Kearsbey	1,657	Aug. 20, 1878	14	272
"Dido"	Heppenheimer & Maurer	1,354	Jan. 15, 1878	13	11
"Dispatch"	Heppenheimer & Maurer	1,470	Apr. 9, 1878	13	638
"Dr. Case's Liniment and Cancer Cure"	P. W. Ziegler and M. W. Case	1,528	May 7, 1878	13	820
"Doctor C. A. Simmons' Hepatic Compound or Liver Cure"	Dowic & Morse	1,700	Oct. 1, 1878	14	488
"D'Ossone's London Writing and Copying Fluid"	C. V. D'Ossone	1,462	Apr. 2, 1878	13	598
"D. S. Brown & Co. Juniper Tar and Glycerine Saponified"	D. S. Brown & Co	1,624	July 16, 1878	14	86
"Dr. Augustine's Laxative Pills"	J. A. Hall	1,630	July 23, 1878	14	120
"Dr. Augustine's Suppositories for Piles"	J. A. Hall	1,629	July 23, 1878	14	120
"Dr. Bancroft's German Elixir"	A. B. Crooks	1,783	Nov. 26, 1878	14	788
"Dr. B. Haselton's Indian Liniment"	C. T. Newman	1,472	Apr. 9, 1878	13	638
"Dr. Button's Coffee"	R. H. Sherman	1,475	Apr. 9, 1878	13	638
"Dr. Case's Cough Cordial"	P. W. Ziegler and M. W. Case	1,527	May 7, 1878	13	820
"Dr. Case's Liver Remedy"	P. W. Ziegler and M. W. Case	1,529	May 7, 1878	13	820
"Dr. E. B. Halliday's Blood Purifier"	S. Blackford	1,468	Apr. 9, 1878	13	638
"Dr. Halpruner's Healing Salve"	W. S. Halpruner	1,452	Mar. 19, 1878	13	501
"Dr. H. Mozley's Lemon Elixir, &c."	H. Mozley	1,433	Mar. 5, 1878	13	410
"Dr. J. E. Roseborough's Compound for Stomach and Heart"	J. E. Roseborough	1,474	Apr. 9, 1878	13	638
"Dr. Kaufmann's Sulphur Bitters"	A. P. Ordway	1,473	Apr. 9, 1878	13	638
"Dr. Kaufmann's Sulphur Porous Plaster"	Ordway Brothers	1,609	July 2, 1878	14	8
"Dr. Macalister's Cough Mixture"	J. P. Leo	1,548	May 21, 1878	13	918
"Dr. Maria F. Haller's Wiener Balsam"	A. Stamm	1,772	Nov. 12, 1878	14	716
"Dr. Maria F. Haller's Wiener Krauter Thee"	A. Stamm	1,771	Nov. 12, 1878	14	716
"Dr. Ordway's Sulphur Blood Purifier"	A. P. Ordway	1,538	May 14, 1878	13	872
"Dr. Ordway's Sulphur Medical Discovery"	A. P. Ordway	1,537	May 14, 1878	13	872
"Dr. Ordway's Sulphur Sarsaparilla"	A. P. Ordway	1,536	May 14, 1878	13	872
"Dr. Shonyo's German Bitters"	Eastman & Fitch	1,441	Mar. 12, 1878	13	458
"Dr. Waters' Hair Restorer"	F. Waters	1,789	Nov. 26, 1878	14	788
"Dr. Winkler's Great German Discovery"	J. Casey	1,768	Nov. 5, 1878	14	680
"Dr. Z. Waters' Honey Balsam"	H. S. Woodard	1,346	Jan. 1, 1878	13	8
"Dr. Z. Waters' Indian Vegetable Cathartic and Liver Pills"	H. S. Woodard	1,344	Jan. 1, 1878	13	8

## Alphabetical list of labels—Continued.

Title.	Name.	No.	Date.	Official Gazette.	
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"Dr. Z. Waters' Raspberry Balsam"	H. S. Woodard	1,345	Jan. 1, 1878	13	8
"Dudley's Emulsion of Pure Cod Liver Oil"	Dudley & Co.	1,459	Mar. 26, 1878	13	556
"Duett"	Heppenheimer & Maurer	1,702	Oct. 1, 1878	14	488
E.					
"Early Friends"	New York Label Publishing Company of N. Witsch and J. Schmitt.	1,762	Nov. 5, 1878	14	680
"Early Rose"	Heppenheimer & Maurer	1,571	June 11, 1878	13	1048
"Economy Works, Cast Steel Files"	Western File Company (limited)	1,478	Apr. 9, 1878	13	638
"Economy Works, Superior Files"	Western File Company (limited)	1,499	Apr. 23, 1878	13	736
"Edwards' Superior Laundry Blueing"	Western Manufacturing Company.	1,542	May 14, 1878	13	872
"E. Guittard & Co., 405 & 407 Sansome St., San Francisco, Cal."	E. Guittard	1,796	Dec. 3, 1878	14	824
"El Boca"	Heppenheimer & Maurer	1,517	May 7, 1878	13	820
"El Circulo De Oro, Five Cent Cigar"	American Cigar Company	1,374	Jan. 22, 1878	13	125
"Elfin"	Heppenheimer & Maurer	1,370	Jan. 29, 1878	13	180
"Elgin Black Ink"	Elgin Ink Company	1,573	June 11, 1878	13	1648
"Elliott's Great Discovery"	J. Elliott	1,780	Nov. 19, 1878	14	750
"El Prince"	Simmons & Staiger	1,677	Sept. 3, 1878	14	348
"English Feed for Horses and Cattle"	O. A. Swart	1,539	May 14, 1878	13	872
"E. M. O. Clough's Fever and Ague Cure"	E. M. O. Clough	1,739	Oct. 29, 1878	14	636
"Etelka"	Heppenheimer & Maurer	1,797	Dec. 3, 1878	14	824
"Eureka Carpet Warp"	J. E. Reynolds	1,361	Jan. 15, 1878	13	11
"Ever Faithful"	Heppenheimer & Maurer	1,568	June 25, 1878	13	1130
"Excellent"	E. Guittard	1,795	Dec. 3, 1878	14	824
"Extra Dress Styles"	H. B. Claffin & Co.	1,405	Feb. 19, 1878	13	376
"Extra Dry"	Frach & Co.	1,329	Jan. 1, 1878	13	8
"Extract Sweet Clover"	D. T. Gale	1,638	July 30, 1878	14	160
F.					
"Fairbanks' Improved Class Collection Box"	M. W. Smith and C. F. Fairbanks.	1,437	Mar. 5, 1878	13	410
"Fairbanks' Sunday School Collection Box"	J. Fairbanks.	1,430	Mar. 5, 1878	13	410
"Family Ale"	Long Island Brewery	1,328	Feb. 26, 1878	13	370
"Farrington's Celebrated Glue"	J. T. Farrington	1,554	May 28, 1878	13	970
"Fascination"	Heppenheimer & Maurer	1,469	Apr. 9, 1878	13	638
"Fearless"	Nenman & Dinglinger	1,585	June 25, 1878	13	1130
"First Mate"	Boies, Fay & Conkey	1,605	July 2, 1878	14	8
"First Stroke"	New York Label Publishing Company of N. Witsch and J. Schmitt.	1,764	Nov. 5, 1878	14	680
"Florida Orange"	J. H. Estill.	1,767	Nov. 5, 1878	14	680
"Florida Orange Marmalade"	L. Warrock	1,593	June 25, 1878	13	1130
"Flowers of Petroleum"	W. E. Jervey	1,692	Sept. 17, 1878	14	416
"Flowers of Petroleum"	W. E. Jervey	1,695	Sept. 24, 1878	14	430
"Fluid Cosmoline (Petroleum)"	E. F. Houghton & Co	1,810	Dec. 10, 1878	14	862
"Fluid Hydrastis"	W. S. Merrill & Co.	1,519	May 7, 1878	13	820
"Forest Home"	Heppenheimer & Maurer	1,393	Feb. 5, 1878	13	222
"Fragrant Carminative Sweet Aroma for the Breath"	Honing & Co	1,673	Sept. 3, 1878	14	348
"Frank Wright's Liquid Blue"	W. H. Singer	1,720	Oct. 15, 1878	14	562
"French Baking Powder"	J. Hewson	1,639	July 30, 1878	14	160
"French, Richards & Co., Strictly Pure Lead, &c."	French, Richards & Co	1,567	June 11, 1878	13	1648
"French's Freckle Remover"	A. S. French	1,392	Feb. 5, 1878	13	222
"French's Rubber Cement"	D. H. French	1,431	Mar. 5, 1878	13	410
"French's Selected Calcined Plaster"	French, Richards & Co	1,568	June 11, 1878	13	1648
"Fresh Cove Oysters"	E. Schoenberg & Co	1,805	Dec. 3, 1878	14	824
"Fringed Wax Gas Lighters or Tapers"	The Houchin Manufacturing Company.	1,744	Oct. 29, 1878	14	636
G.					
"Geneva Liniment"	W. S. Schermerhorn	1,627	July 16, 1878	14	86
"Geneva Tooth Wash"	W. S. Schermerhorn	1,632	July 23, 1878	14	120
"Genuine Persian Tooth Paste"	E. C. Lee	1,349	Jan. 8, 1878	13	48
"Gerard's Preventive"	W. Gerard	1,325	Feb. 26, 1878	13	370
"Ginger Aperient"	E. J. Haines & Co	1,775	Nov. 19, 1878	14	750
"Cleaning Gold"	Boies, Fay & Conkey	1,604	July 2, 1878	14	8
"Godsay's East India Fever Tree Extract"	C. D. Chase	1,680	Sept. 10, 1878	14	380
"Good Taste"	Heppenheimer & Maurer	1,355	Jan. 15, 1878	13	11
"Grand Havana Filler Hand Made"	G. Gaab	1,586	June 25, 1878	13	1130
"Grand Victory"	Kerbs & Spiess	1,523	Apr. 30, 1878	13	774
"Green Peas"	E. Schoenberg & Co	1,803	Dec. 3, 1878	14	824
"Guarantee"	B. S. Allen & Co	1,323	Feb. 26, 1878	13	370
"Guaranteed Full Count"	J. A. Dushane	1,390	Feb. 5, 1878	13	222
"Guardias' Ointment"	Soler & Guardias	1,660	Aug. 20, 1878	14	272
"G. V. Howe's Cherry Tonic"	G. V. Howe	1,460	Mar. 26, 1878	13	550
H.					
"Hamburger Boneless Ham"	T. Culver	1,415	Feb. 19, 1878	13	326
"Happy Day"	Boies, Fay & Conkey	1,603	July 2, 1878	14	8
"Health Food Company's Gluten Soap"	F. Fuller	1,644	Aug. 6, 1878	14	206
"Hegeman & Co.'s Celebrated Pastille or Witch-Hazel Lozenges"	Hegeman & Co	1,565	June 11, 1878	13	1612
"Hegeman's Formerly Velpen's Celebrated Remedy for Diarrhoea, Dysentery, Cholera Morbus, &c."	Hegeman & Co	1,758	Nov. 5, 1878	14	680
"Hegeman's Tolu and Liverwort Expectorant"	Hegeman & Co	1,757	Nov. 5, 1878	14	680
"Helios"	Heppenheimer & Maurer	1,613	July 9, 1878	14	48
"Henry's Liver Pills"	W. H. Caterson	1,625	July 16, 1878	14	86
"Hertshaw's Cure"	L. A. Hastings	1,442	Mar. 12, 1878	13	458
"Hesselroth's Universal Healing Plaster"	L. Hesselroth	1,566	June 11, 1878	13	1648
"Hetherington's Tropic Fruit Laxative"	J. E. Hetherington	1,547	May 21, 1878	13	918
"Hetherington's Tropic Fruit Laxative"	J. E. Hetherington	1,576	June 18, 1878	13	1684
"Hext Paper Fastener"	W. J. Brown, jr	1,816	Dec. 17, 1878	14	904
"Higgins' German Laundry Soap"	C. S. Higgins & Co	1,463	Apr. 2, 1878	13	598

## Alphabetical list of labels—Continued.

Title.	Name of patentee.	No.	Date.	Official Gazette.	
				Vol.	Page.
"Hill's Creamed Castor Oil" .....	Hill & Buss. ....	1,518	May 2, 1878	13	820
"Hilledale M. 'F.' G. Company" .....	F. Sweetser .....	1,540	May 14, 1878	13	872
"H. M. Myers Patent Socket Strap Scoop" .....	H. M. Myers .....	1,646	Aug. 13, 1878	14	236
"H. M. Myers, Solid Steel" .....	H. M. Myers .....	1,504	Apr. 30, 1878	13	774
"Holland Shades" .....	Taft & Co. ....	1,653	Aug. 13, 1878	14	236
"Hood's French Cologne" .....	M. C. Hood & Co. ....	1,546	May 21, 1878	13	918
"Hooker's Stomach Bitters" .....	J. C. Ferree .....	1,399	Feb. 12, 1878	13	278
"Hop Tonic" .....	C. R. Stuart .....	1,569	June 11, 1878	13	1048
"Hop Tonic" .....	C. R. Stuart .....	1,668	Aug. 27, 1878	14	310
"Hop Tonic" .....	C. R. Stuart .....	1,814	Dec. 10, 1878	14	862
"Hortensia" .....	W. Wicke & Co. ....	1,496	Apr. 23, 1878	13	730
"Household Mixed Paint" .....	A. T. Stevens .....	1,650	Aug. 13, 1878	14	236
"Howard's Great South American Remedy" .....	A. Howard .....	1,375	Jan. 22, 1878	13	125
"Hussey's Special Message and Letter Box" .....	R. Eason .....	1,375	Jan. 22, 1878	13	125
I.					
"Idol" .....	Heppenheimer & Maurer .....	1,358	Jan. 15, 1878	13	11
"Imperial Casket" .....	Steinman Jewelry Company .....	1,421	Feb. 19, 1878	13	325
"Imperial Packing Company" .....	J. W. Follett .....	1,793	Dec. 3, 1878	14	824
"Indicators" .....	A. Dougherty .....	1,784	Nov. 26, 1878	14	783
"Information For The Trade" .....	R. Cahill .....	1,377	Jan. 29, 1878	13	180
"Ink Photo" .....	J. B. Medlar .....	1,521	May 7, 1878	13	820
"International Exhibition Underwear and Hosiery" .....	American Hosiery Company .....	1,508	Apr. 30, 1878	13	774
J.					
"Jabon Economico De Colgate & Ca." .....	Colgate & Co. ....	1,362	Jan. 22, 1878	13	125
"Japan Teas" .....	E. Guittard .....	1,794	Dec. 3, 1878	14	324
"Japanese Mills" .....	Crane Brothers .....	1,501	Apr. 23, 1878	13	730
"Jaques' Triple Extract" .....	J. A. Lansing .....	1,652	Aug. 13, 1878	14	236
"Java Mills" .....	H. Pennington & Co. ....	1,769	Nov. 5, 1878	14	680
"Jeffers' French Catarrh Cure" .....	P. Jeffers .....	1,394	Feb. 5, 1878	13	232
"Jeffers' Original Bronchial Cigarettes" &c .....	P. Jeffers .....	1,343	Jan. 1, 1878	13	8
"Jno. Whittaker's Summer Sugar-Cured Hams" .....	J. Whittaker .....	1,729	Oct. 15, 1878	14	562
"J. S. Eggleston's Non-Corrosive Preparation" .....	J. S. Eggleston .....	1,532	May 14, 1878	13	872
"Just on Time" .....	New York Label Publishing Company of N. Witsch & J. Schmitt. ....	1,748	Oct. 29, 1878	14	636
K.					
"Kamillen Seife, Chamomile Soap" .....	C. D. S. Früh .....	1,516	May 7, 1878	13	820
"Kelley's French Eau De Cologne" .....	P. H. Kelley .....	1,544	May 14, 1878	13	872
"Kimball's Metallic Roofing Paint" .....	D. B. Kimball .....	1,491	Apr. 23, 1878	13	730
"Kingsford's Oswego Pure Starch" .....	T. Kingsford .....	1,619	July 9, 1878	14	48
"Kingsford's Oswego Silver Gloss Starch" .....	T. Kingsford .....	1,620	July 9, 1878	14	48
"Kokoleon, An Exquisite Emollient," etc .....	E. C. Angell .....	1,582	June 25, 1878	13	1130
"Krauser's Florida Cough Syrup" .....	E. Krauser .....	1,819	Dec. 17, 1878	14	904
L.					
"Label for Circulars, &c." .....	M. B. Leavitt .....	1,774	Nov. 19, 1878	14	750
"Ladies' Favorite Yeast" .....	J. H. Devens .....	1,699	Oct. 1, 1878	14	488
"La Eminencia" .....	W. Wicks & Co. ....	1,557	May 28, 1878	13	970
"Laimun Citrus, the Book-Keeper's Friend" .....	Staples & Ross .....	1,759	Nov. 5, 1878	14	680
"La Linda" .....	E. Bemis, jr. ....	1,746	Oct. 29, 1878	14	636
"La Noblesa" .....	Heppenheimer & Maurer .....	1,534	May 14, 1878	13	872
"La Vuelta" .....	New York Label Publishing Company of N. Witsch & J. Schmitt. ....	1,753	Oct. 29, 1878	14	636
"Lawrence Thread" .....	J. O. King .....	1,327	Feb. 26, 1878	13	370
"Legion of Honor" .....	Levy Brothers .....	1,401	Feb. 12, 1878	13	278
"Lewis' Improved Potato Bug Exterminator" .....	P. C. Lewis .....	1,359	Jan. 15, 1878	13	11
"Liebig Cocoa Beef Tonic (Peptonized)" .....	M. Hoffman .....	1,587	June 25, 1878	13	1130
"Little Satan" .....	Heppenheimer & Maurer .....	1,731	Oct. 22, 1878	14	602
"Lydia E. Pinkham's Liver Pills" .....	W. H. Pinkham .....	1,645	Aug. 6, 1878	14	206
M.					
"Mabille" .....	Heppenheimer & Maurer .....	1,612	July 9, 1878	14	48
"Madam Le Beautiller's Elixir of Youth Lotion" .....	L. Strong .....	1,669	Aug. 27, 1878	14	310
"Magill's Chill Cure" .....	H. A. Magill .....	1,432	Mar. 5, 1878	13	410
"Malakof Bitters" .....	A. Walz .....	1,543	May 14, 1878	13	872
"Malarial Cure" .....	W. G. Atwater .....	1,487	Apr. 23, 1878	13	730
"Manhattan Mills" .....	J. O. King .....	4,326	Feb. 26, 1878	13	370
"Manufactured Expressly for Cigarettes and Pipe Smoking" .....	Goodwin & Co. ....	1,710	Oct. 8, 1878	14	526
"Manufactured from Extra Cast Steel" .....	Collins Company .....	1,550	May 21, 1878	13	918
"Marshall's Improved Condition Powder for Horses and Cattle" .....	M. W. Marshall .....	1,396	Feb. 5, 1878	13	232
"Marshall's Lung Syrup for Coughs, Colds," &c., &c .....	M. W. Marshall .....	1,395	Feb. 5, 1878	13	232
"Marshall's Rheumatic Liniment," &c .....	M. W. Marshall .....	1,351	Jan. 8, 1878	13	48
"Marshall's Rheumatic Oil Liniment" .....	M. W. Marshall .....	1,350	Jan. 8, 1878	13	48
"Martin's Ready Printed Perforated Addresses" .....	C. S. Martin .....	1,471	Apr. 9, 1878	13	638
"May Blossom" .....	Boies, Fay & Conkey .....	1,602	July 2, 1878	14	8
"May Queen" .....	W. Wicke & Co. ....	1,591	June 25, 1878	13	1130
"Medicated Cream for External Application" .....	Medicated Cream Company .....	1,773	Nov. 12, 1878	14	716
"Mercedes" .....	Heppenheimer & Maurer .....	1,330	Jan. 1, 1878	13	8
"Merchants' Tobacco Company, Boston" .....	Merchants' Tobacco Company .....	1,445	Mar. 12, 1878	13	458
"Merino Finish" .....	W. Simpson, Sons & Co. ....	1,453	Mar. 19, 1878	13	501
"Mighill Dustin's Celebrated Ointment or Salve" .....	S. B. Dustin .....	1,510	Apr. 30, 1878	13	774
"Mineral Olive Oil" .....	Thompson & Bedford .....	1,486	Apr. 16, 1878	13	678
"Missouri Cider" .....	Green & Clark .....	1,666	Aug. 27, 1878	14	310
"Mohawk Valley M'fg Co. Cambrics" .....	Smith, Sanford & Co. ....	1,648	Aug. 13, 1878	14	236
"M. Ottenheimer & Son, Compressed Cooked Spiced Beef" .....	M. Ottenheimer & Son .....	1,608	July 2, 1878	14	8
"Mrs. Jones' Burn Ointment" .....	A. W. Jones .....	1,556	May 28, 1878	13	970
"Mrs. Kendall's Ointment" .....	E. Kendall .....	1,696	Sept. 24, 1878	14	450
"Murphy's Irish Cough Syrup" .....	J. J. Murphy .....	1,505	Apr. 30, 1878	13	774

## Alphabetical list of labels—Continued.

Title.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
"Murray Hill" .....	Heppenheimer & Maurer .....	1,357	Jan. 15, 1878	13	11
"Mushroom Powder" .....	J. B. Anthony & Co. ....	1,688	Sept. 10, 1878	14	380
N.					
"No. 1 Laundry Blueing, &c." .....	Western Manufacturing Com- pany. ....	1,477	Apr. 9, 1878	13	638
"No. 53" .....	New York Label Publishing Company of N. Witsch and J. Schmitt. ....	1,725	Oct. 15, 1878	14	562
"No. 69" .....	New York Label Publishing Company of N. Witsch and J. Schmitt. ....	1,723	Oct. 15, 1878	14	562
"No. 83" .....	New York Label Publishing Company of N. Witsch and J. Schmitt. ....	1,724	Oct. 15, 1878	14	562
"No. 102" .....	New York Label Publishing Company of N. Witsch and J. Schmitt. ....	1,726	Oct. 15, 1878	14	562
"No. 122" .....	New York Label Publishing Company of N. Witsch and J. Schmitt. ....	1,722	Oct. 15, 1878	14	562
"Nuremberg Ultramarine Works, Wash Blue in Balls" .....	C. F. Zentgraf .....	1,336	Jan. 1, 1878	13	8
O.					
"Ocean Queen" .....	Boies, Fay & Conkey .....	1,606	July 2, 1878	14	8
"Ocean Spray" .....	New York Label Publishing Company of N. Witsch and J. Schmitt. ....	1,751	Oct. 29, 1878	14	636
"Oil Gem" .....	J. B. Medlar .....	1,520	May 7, 1878	13	820
"Old Abe" .....	Heppenheimer & Maurer .....	1,356	Jan. 15, 1878	13	11
"Old Mill" .....	Heppenheimer & Maurer .....	1,464	Apr. 2, 1878	13	598
"On All Cash Sales of Twenty-Five Cents," etc .....	W. A. Ezekiel .....	1,515	May 7, 1878	13	820
"Opera House" .....	New York Label Publishing Company of N. Witsch and J. Schmitt. ....	1,749	Oct. 29, 1878	14	636
"Oriental Company, Family German Soap" .....	Cornwall & Brother .....	1,407	Feb. 19, 1878	13	326
"Orlando" .....	S. Fuguet & Sons .....	1,617	July 9, 1878	14	48
"Orlando" .....	S. Fuguet & Sons .....	1,618	July 9, 1878	14	48
"Our Favorite Nursing Shield" .....	J. W. Patch .....	1,522	May 7, 1878	13	820
P.					
"Parisian Dress Renovator" .....	G. V. Magee .....	1,493	Apr. 23, 1878	13	730
"Parker's Ginger Tonic" .....	Hiscox & Co. ....	1,703	Oct. 1, 1878	14	488
"Parker's Hair Balsam" .....	Hiscox & Co. ....	1,704	Oct. 1, 1878	14	488
"Parvules" .....	W. R. Warner & Co. ....	1,467	Apr. 2, 1878	13	598
"Patent Radiant Jet Black" .....	New York Dyeing and Printing Establishment. ....	1,631	July 23, 1878	14	120
"P. C. Kendall's Baking Powder" .....	P. C. Kendall .....	1,705	Oct. 1, 1878	14	488
"Peaches" .....	E. Schoenberg & Co. ....	1,801	Dec. 3, 1878	14	824
"Pectoral" .....	J. D. Judge .....	1,818	Dec. 17, 1878	14	904
"Penelope" .....	Heppenheimer & Maurer .....	1,378	Jan. 29, 1878	13	180
"Pennsylvania Oaten Grits" .....	J. S. Detweiler & Co. ....	1,338	Jan. 1, 1878	13	8
"Pepto Quinine" .....	N. R. Bradner .....	1,663	Aug. 27, 1878	14	310
"Perfection Blacking" .....	Tibbals, Abbott & Co. ....	1,665	Aug. 27, 1878	14	310
"Perry's Harness Oil Soap" .....	J. A. Perry .....	1,397	Feb. 5, 1878	13	232
"Persian Kababa" .....	G. L. Stevens .....	1,697	Sept. 24, 1878	14	450
"Phillips' Handle Advertiser," etc .....	J. E. Phillips .....	1,595	July 2, 1878	14	8
"Place's Salus Illuminating Gas" .....	F. B. Place .....	1,495	Apr. 23, 1878	13	730
"Plastic Tin" .....	H. S. Chase .....	1,715	Oct. 15, 1878	14	562
"Pneumonic Compound Medicines for Swine" .....	T. C. Raymer .....	1,446	Mar. 12, 1878	13	458
"Pow Wow" .....	Heppenheimer & Maurer .....	1,465	Apr. 2, 1878	13	598
"Premier" .....	New York Label Publishing Company of N. Witsch and J. Schmitt. ....	1,765	Nov. 5, 1878	14	680
"Prentiss' Extract of Jamaica Ginger" .....	Tibbals, Abbott & Co. ....	1,664	Aug. 27, 1878	14	310
"Preserving Fluid for Bottle and Export Lager Beer and Ale" .....	W. Zinsser & Co. ....	1,360	Jan. 15, 1878	13	11
"Prof. A. J. Rainey's Hog Cholera Compound" .....	A. J. Rainey .....	1,647	Aug. 13, 1878	14	236
"Prof. Dykes' Beard Elixir" .....	L. A. L. Smith & Co. ....	1,590	June 25, 1878	13	1130
"Prof. Shaw's Fragrant Antiseptic Cologne," &c .....	Littell & Shaw .....	1,381	Jan. 29, 1878	13	180
"Pure Silver Coin White Lead" .....	Western White Lead Company ..	1,736	Oct. 22, 1878	14	602
"Pure Sublimed White Lead" .....	S. P. Wetherill .....	1,698	Sept. 24, 1878	14	450
"Puro Habana" .....	Schmidt & Co. ....	1,523	May 7, 1878	13	820
Q.					
"Quintet" .....	New York Label Publishing Company of N. Witsch and J. Schmitt. ....	1,714	Oct. 8, 1878	14	526
R.					
"Ralph's Carolina Snuff" .....	Stewart, Ralph & Co. ....	1,367	Jan. 22, 1878	13	125
"Ralph's Scotch Snuff" .....	Stewart, Ralph & Co. ....	1,366	Jan. 22, 1878	13	125
"Ralph's Scotch Snuff" .....	Stewart, Ralph & Co. ....	1,369	Jan. 22, 1878	13	125
"Rarus" .....	Heppenheimer & Maurer .....	1,611	July 9, 1878	14	48
"R. A. Stuart's Rockbridge Co." .....	D. O. Davis & Co. ....	1,712	Oct. 8, 1878	14	536
"Ream Artist's Music Paper No. —" .....	Boorum & Pease .....	1,574	June 18, 1878	13	1084
"Red and Black" .....	Kerbs & Spiess .....	1,711	Oct. 8, 1878	14	536
"Red Cloud" .....	Heppenheimer & Maurer .....	1,718	Oct. 15, 1878	14	562
"Red Tonic Pills" .....	Stewart & Barry .....	1,706	Oct. 1, 1878	14	488
"Reid's Six-Cord Thread" .....	Williamatic Linen Company .....	1,395	Jan. 29, 1878	13	180
"Ricksecker's Bay Rum Shaving Stick" .....	T. Ricksecker .....	1,419	Feb. 19, 1878	13	326
"Right Out" .....	Heppenheimer & Maurer .....	1,750	Oct. 22, 1878	14	602
"Riker's American Face Powder" .....	W. B. & W. H. Riker .....	1,420	Feb. 19, 1878	13	326

## Alphabetical list of labels—Continued.

Title.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
"Robert A. Hance's Elixir Coca Comp."	R. A. Hance	1,363	Jan. 22, 1878	13	125
"Rochester's Absorbing Cushion"	S. N. Rochester	1,815	Dec. 10, 1878	14	862
"Rock City Sheeting"	Tennessee Manufacturing Company	1,525	May 7, 1878	13	820
"Rock Oil Salve"	J. T. Clark	1,792	Dec. 3, 1878	14	824
"Romaleon. An Exquisite Emollient," &c.	E. C. Angell	1,583	June 25, 1878	13	1130
"Rome's Tooth Powder"	J. R. Bond	1,376	Jan. 29, 1878	13	180
"Rose Cream"	J. S. Plumb	1,798	Dec. 3, 1878	14	824
"Rose's Laxative Bonbons"	C. P. Rose	1,742	Oct. 29, 1878	14	636
"Royal"	H. Pennington & Co.	1,686	Sept. 10, 1878	14	380
S.					
"Saccharated Chloro Pepsine"	B. W. Dyer	1,655	Aug. 20, 1878	14	272
"Sam'l S. Scott's Great Hair Restorative"	S. S. Scott	1,635	July 23, 1878	14	120
"Sample Label"	J. Wanamaker	1,779	Nov. 19, 1878	14	750
"Scotch Snuff of a Very Superior Quality"	Stewart, Ralph & Co.	1,368	Jan. 22, 1878	13	125
"Scott's Cocoanut Macaroons"	C. L. Scott	1,524	May 7, 1878	13	820
"Seventh Daughter"	Heppenheimer & Maurer	1,333	Jan. 1, 1878	13	8
"Sheets to the Quire"	J. A. Dushane	1,389	Feb. 5, 1878	13	232
"Shiloh's Belladonna Plaster"	S. C. Wells	1,403	Feb. 12, 1878	13	278
"Siberian Chillsblain Ointment"	J. S. Plumb	1,812	Dec. 10, 1878	14	862
"Silver White Lead"	S. Loag	1,535	May 14, 1878	13	872
"Sloan's Lacto Phosphate of Lime, Iron and Cod-Liver Oil"	Sloan & Co.	1,436	Mar. 5, 1878	13	410
"Smith's Agricultural Liniment"	T. B. Smith	1,579	June 18, 1878	13	1084
"Snow Flake"	New York Label Publishing Company of N. Witsch and J. Schmitt.	1,750	Oct. 29, 1878	14	636
"Solidified Glycerine"	J. R. Gray	1,324	Feb. 26, 1878	13	370
"South American Wrapper"	J. R. Sutton	1,788	Nov. 26, 1878	14	788
"Spanish Cholera Remedy"	R. S. Spaulding	1,069	Aug. 20, 1878	14	272
"Special Artist"	Heppenheimer & Maurer	1,380	Jan. 29, 1878	13	180
"Spoon Busk"	J. Bowers	1,807	Dec. 10, 1878	14	862
"Spread Eagle"	Heppenheimer & Maurer	1,777	Nov. 19, 1878	14	750
"Stannon's Gold for Permanent Fillings"	H. S. Chase	1,456	Mar. 26, 1878	13	550
"Stan's Liniment"	F. B. Horne	1,741	Oct. 29, 1878	14	636
"Sterling Silver Polish"	S. F. Howard and L. E. Wardell	1,443	Mar. 12, 1878	13	458
"Stewart, Ralph & Co., Manufacturers of Scotch Snuff"	Stewart, Ralph & Co.	1,370	Jan. 22, 1878	13	125
"St. Louis Villa and Cottage Paints"	Norton & Wieder	1,485	Apr. 16, 1878	13	678
"Stripped—Sample Warranted"	Bensel & Co.	1,451	Mar. 19, 1878	13	501
"Sugar Corn"	E. Schoenberg & Co.	1,804	Dec. 3, 1878	14	824
"Sulphide of Arsenicum"	G. C. Dohme & Co.	1,429	Mar. 5, 1878	13	410
"Sunday School Class Box"	M. W. Smith and F. C. Fairbanks	1,372	Jan. 22, 1878	13	125
"Superior Scotch Snuff"	G. W. Gall & Ax	1,701	Oct. 1, 1878	14	488
"Sure Cure for Sick Headache"	Hackley & Eldridge	1,634	July 23, 1878	14	120
"Sure Pop"	Heppenheimer & Maurer	1,572	June 11, 1878	13	1048
"Swiss Kumyss or Lacto Pepticum"	E. A. Du Puy	1,341	Jan. 1, 1878	13	8
"Sylvester's Cure for Neuralgia and Diphtheria"	Sylvester & Dunn	1,371	Jan. 22, 1878	13	125
"Syrup Glycerole of Ferrous Chloride"	G. I. McKelway	1,563	June 4, 1878	13	1012
"Syrup of Dovers Powder"	W. L. Gregory	1,707	Oct. 1, 1878	14	488
T.					
"Tarr's Pain Cure"	C. A. Tarr	1,476	Apr. 9, 1878	13	638
"The Amazon Steel"	Thomson, Langdon & Co.	1,447	Mar. 12, 1878	13	458
"The American Corn, Bunion, and Wart Cure"	Elbert, Brother & Co.	1,391	Feb. 5, 1878	13	232
"The American Popular Five Cent Segar"	G. P. Lies & Co.	1,444	Mar. 12, 1878	13	458
"The ——— Business Directory"	F. C. Osborn	1,352	Jan. 8, 1878	13	43
"The Celebrated Champagne Beer"	G. Hummel & Co.	1,651	Aug. 13, 1878	14	236
"The Charter Oak Axe"	Collins Company	1,398	Feb. 5, 1878	13	232
"The Chautauqua Tin Lined Butter Package"	O. J. Willard	1,509	Apr. 30, 1878	13	774
"The Club House"	Engelbrecht, Fox & Co.	1,716	Oct. 15, 1878	14	562
"The Crack New Yorker"	Kerbs & Spiess	1,607	July 2, 1878	14	8
"The Deodorizing Garbage and Ash Box"	W. C. Kittredge & Co.	1,484	Apr. 16, 1878	13	678
"The Druggist Brand of Pure Refined Oil of Peppermint"	M. H. Dillenbeck	1,649	Aug. 13, 1878	14	236
"The Egg Preserver"	A. B. Thornton	1,615	July 9, 1878	14	43
"The Eradicator"	J. McCalvey	1,578	June 18, 1878	13	1084
"The Everlasting"	F. Hanschildt	1,683	Sept. 10, 1878	14	380
"The Everlasting"	F. Hanschildt	1,684	Sept. 10, 1878	14	380
"The Fashionable Ink Perfumed"	H. Worden	1,580	June 18, 1878	13	1084
"The Great American Cure and Preventive for Hog Cholera"	Beers & Co.	1,558	May 28, 1878	13	970
"The Great Tokien Tea"	J. A. Palmer & Co.	1,778	Nov. 19, 1878	14	750
"The Great National Remedy"	Williamson & Burnley	1,633	July 23, 1878	14	120
"The Great Novelty of the Age, &c."	J. L. Miller & Co.	1,461	Mar. 26, 1878	13	550
"The Goodyear Union Syringe No. 3, &c."	Goodyear Rubber Company	1,570	June 11, 1878	13	1048
"The Hit"	Heppenheimer & Maurer	1,732	Oct. 22, 1878	14	602
"The Hurdle"	New York Label Publishing Company of N. Witsch and J. Schmitt.	1,763	Nov. 5, 1878	14	680
"The Never Break Corset-Clasp"	Thomson, Langdon & Co.	1,382	Jan. 29, 1878	13	180
"The New Elgin Stove Polish, &c."	H. G. Weatherill	1,735	Oct. 22, 1878	14	602
"The Self Measuring and Scale Package"	Guittard & Co.	1,809	Dec. 10, 1878	14	862
"The Self Washer"	T. M. Adams	1,671	Sept. 3, 1878	14	348
"The Start"	Heppenheimer & Maurer	1,332	Jan. 1, 1878	13	8
"The Stock Ointment"	Painter & Calvert	1,494	Apr. 23, 1878	13	730
"The Wonderful Lefevre Diamonds"	American Jewelry Company	1,690	Sept. 17, 1878	14	416
"These Prints are Guaranteed to be Full Madder," &c.	H. B. Clafin & Co.	1,406	Feb. 19, 1878	13	326
"These Segars are made by Cubans at Key West, Florida"	W. A. Ezekiel	1,552	May 28, 1878	13	970
"Thomson's Torso Corset"	Thomson, Langdon & Co.	1,662	Aug. 20, 1878	14	272
"Thomson's Unbreakable"	Thomson, Langdon & Co.	1,661	Aug. 20, 1878	14	272
"Tint For Bank-Checks and Drafts"	Continental Bank Note Company	1,386	Jan. 29, 1878	13	180
"To Protect the Public Against Counterfeits," etc.	F. A. Miller	1,492	Feb. 12, 1878	13	278
"Tomatoes"	E. Schoenberg & Co.	1,802	Dec. 3, 1878	14	824
"Tropic Fruit Laxative"	J. E. Hetherington	1,577	June 18, 1878	13	1084
"Tunyoap Watertight"	W. P. Jenney	1,417	Feb. 19, 1878	13	326



*Alphabetical list of labels—Continued.*

Title.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
"Turnout" .....	Heppenheimer & Maurer .....	1,740	Oct. 29, 1878	14	636
"Tuxpan Chewing Gum" .....	R. F. George .....	1,533	May 14, 1878	13	872
U.					
"U. S. M." .....	New York Label Publishing Company of N. Witsch and J. Schmitt.	1,727	Oct. 15, 1878	14	562
"U. S. Mail" .....	Heppenheimer & Maurer .....	1,694	Sept. 24, 1878	14	450
"U. S. Mail" .....	Heppenheimer & Maurer .....	1,733	Oct. 22, 1878	14	602
"Uncle Sam's Delight" .....	New York Label Publishing Company of N. Witsch and J. Schmitt.	1,752	Oct. 29, 1878	14	636
"Union Color Company" .....	T. Ramsey .....	1,589	June 25, 1878	13	1130
"Unrivalled" .....	H. Pennington & Co. ....	1,685	Sept. 10, 1878	14	380
V.					
"Van Buren's Rheumatic Compound" .....	B. Van Buren .....	1,745	Oct. 29, 1878	14	636
"Vinum Digestivum (Digestive Wine)" .....	W. Procter, jr., & Co. ....	1,626	July 16, 1878	14	85
"Volney's Cardamom Compound" .....	C. H. Davis .....	1,643	Aug. 6, 1878	14	206
W.					
"Walcott's Remedy for Pain" .....	E. H. Walcott .....	1,373	Jan. 22, 1878	13	125
"Wallingford's Garget Cure" .....	W. W. Whipple & Co. ....	1,562	May 28, 1878	13	970
"Walter G. Wilson & Co.'s Beef Fibrine Biscuit" .....	W. G. Wilson & Co. ....	1,721	Oct. 15, 1878	14	562
"Warranted All Linen" .....	Crane Brothers .....	1,500	Apr. 23, 1878	13	730
"Wenck's American Cologne" .....	Wenck & Beltor .....	1,322	Feb. 19, 1878	13	326
"West's English Medicated Black Currant Cough Lozenge" .....	W. West .....	1,755	Oct. 29, 1878	14	636
"Western File Works" .....	Western File Company (limited). ..	1,479	Apr. 9, 1878	13	638
"Western Files" .....	Western File Company (limited). ..	1,497	Apr. 23, 1878	13	730
"Whitlock's Key West" .....	P. Whitlock .....	1,526	May 7, 1878	13	820
"Williams & Moore's Mexican Insect Powder" .....	Williams & Moore .....	1,592	June 25, 1878	13	1130
"Williams' Vegetable Pain Exterminator" .....	M. F. Williams & Co. ....	1,531	June 18, 1878	13	1084
"Willimantic Six-Cord Warranted 200 Yards White, 12" .....	Willimantic Linen Company .....	1,383	Jan. 29, 1878	13	189
"Wilson's Carburetted Acid Phosphate, &c." .....	Townsend, Wilson & Co. ....	1,507	Apr. 30, 1878	13	774
"Wilson's Salicyliated Pure Castile Soap" .....	Townsend, Wilson & Co. ....	1,506	Apr. 30, 1878	13	774
"Wine, Beef, Cinchona, and Pyrophosphate of Iron" .....	O. C. Rappold .....	1,621	July 9, 1878	14	48
"Witch Hazel (Hamamelis) Bitters" .....	B. W. Dyer .....	1,502	Apr. 30, 1878	13	774
"Witch Hazel Ointment" .....	B. W. Dyer .....	1,416	Feb. 19, 1878	13	326
"Wm. G. Bell & Co., Boston, Mass., U. S. A. Manufacturers and Proprietors of Bell's Celebrated Sausage Spice." .....	W. G. Bell .....	1,439	Mar. 12, 1878	13	458
"Wood Tag" .....	Pioneer Tobacco Company .....	1,530	May 7, 1878	13	820
"Woodbine Mills" .....	J. A. Dushane .....	1,388	Feb. 5, 1878	13	232
"Wood's Saccharine Antiseptic" .....	M. M. Wood .....	1,404	Feb. 12, 1878	13	278
"Woodward Vegetable Liver Renovator" .....	G. Y. Woodward .....	1,654	Aug. 13, 1878	14	236
"Worm Oil" .....	E. S. Lyndon .....	1,492	Apr. 23, 1878	13	730
Y.					
"Yoke Band" .....	Beiermeister & Son .....	1,481	Apr. 16, 1878	13	678
"Yoke Band Collar" .....	Beiermeister & Son .....	1,488	Apr. 9, 1878	13	730
Z.					
"Zeigler's Ague Pad" .....	J. W. Zeigler & Co. ....	1,614	July 9, 1878	14	48

## ALPHABETICAL LIST OF DISCLAIMERS.

Invention.	Name of patentee.	Original No.	Original date.	Disclaimer filed.	Official Gazette.	
					Vol.	Page.
C.						
Clock .....	Silas B. Terry .....	84,517	Dec. 1, 1868	July 5, 1878	14	48
Clock-dial .....	S. Emerson Root... (Reissue) .....	6,580	Aug. 3, 1875	Dec. 28, 1877	13	8
D.						
Duplex telegraph .....	Thomas A. Edison .....	168,385	Oct. 5, 1875	Nov. 16, 1878	14	750
H.						
Horseshoe .....	John D. Billings and Marcus A. Decker.	187,699	Feb. 27, 1877	Oct. 5, 1878	14	526
I.						
Induction-coil apparatus and circuit-breaker....	Priscilla Webster Page, administratrix of Charles G. Page. (Reissue.)	4,588	Oct. 10, 1871	June 18, 1878	13	1084
K.						
Kettles, Projections for .....	David Stuart .....	4,865	Oct. 3, 1872	May 28, 1878	13	918
L.						
Limb-receiver .....	Horace R. Allen .....	170,217	Nov. 23, 1875	Jan. 28, 1878	.....	.....
R.						
Reed-organ .....	Riley Burdett .....	87,241	Feb. 23, 1869	Nov. 29, 1878	14	824
S.						
Skate .....	Oliver Edwards .....	192,643	July 3, 1877	May 9, 1878	13	872
Suspenders .....	Thomas O. Potter .....	194,616	Aug. 28, 1877	Jan. 9, 1878	13	8















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